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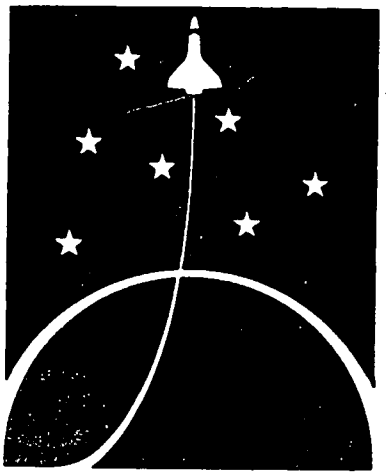
ABSTRACT

The Challenger Center for Space Science Education uses space exploration as a theme to create a positive learning experience that raises students' expectations of success; fosters in them a long-term interest in math, science, and technology; and motivates them to pursue studies in these areas. This document is a feasibility report for establishing a Challenger Learning Center in the city of Kenai in Alaska. Sections include: (1) Executive Summary; (2) Introduction; (3) Overview and Background; (4) Challenger Center's Place in Kenai; (5) Challenger Center Programs; (6) Audience and Market Analysis; (7) Facility Design; (8) Facility Ownership and Operation; (9) Construction Cost and Funding; and (10) Benefits to the Area and to the State of Alaska. Appendices contain information on demographics, Challenger Learning Centers, and construction and financing. (JRH)



Challenger
CENTER®

Alaska Challenger Learning Center

Feasibility Report

Submitted to

City of Kenai

by
Alaska Challenger Learning Center
Steering Committee
facilitated by
K. Scott & Associates, Inc.
Kenai, Alaska

Challenger CENTER®

April 30, 1996

John J. Williams
Mayor
City of Kenai
210 Fidlago Avenue, Suite 200
Kenai, Alaska 99611-7794

Dear Mr. Williams:

This letter is to advise you of Challenger Center's Board of Directors enthusiastic approval for the development of a Challenger Learning Center in Kenai, Alaska. We look forward to welcoming the City of Kenai as a partner of the Challenger Learning Center network.

The vision of "The Science and Industry Institute of Alaska" as detailed in your Challenger Learning Center application and feasibility study promotes high educational goals and standards. We wholeheartedly agree that a Challenger Learning Center will complement the exemplary plans for your facility.

It is my understanding that plans currently call for the opening of the Challenger Learning Center in Fall 1998. Annie Roskell, Regional Director, will continue to work with your community on educational programming, contract preparation and related events.

Thank you for involving Challenger Center in your mission to serve students and educators throughout the state of Alaska. Challenger Center anticipates a productive and meaningful partnership with the City of Kenai.

Sincerely,

Vance R. Ablott
President

1029 North Royal Street Suite 300 Alexandria, Virginia 22314 703-683-9740 FAX 703-683-7546

Acknowledgments

This first-phase development step for the Alaska Challenger Learning Center, preparing a feasibility analysis, has been built on a strong foundation of partnerships and volunteers. The insightfulness of the Kenai City Council, Mayor and city administration, the dedication of the all volunteer steering committee and the commitment of the Alaska Aerospace Development Corporation and the Challenger Center for Space Science Education in Alexandria, Virginia has put the Alaska Challenger Learning Center "a giant step" closer to reality. This study and all the Alaska Challenger Learning Center activities have been undertaken with great enthusiasm and personal commitment by a dynamic team.

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Cover: Our cover proudly displays the registered logo of the Challenger Center for Space Science Education used with the permission of the Regional Director, Annie Roskell.

Drawings: The space art was done by students of Jan Bobek's, 5th grade class at Soldotna Elementary School. These and several other pieces were on display in the Challenger Center booth at the Village Fair in Kenai, Alaska February, 1996.

Executive Summary

The Alaska Challenger Learning Center Steering Committee, convened by the City of Kenai and facilitated by K. Scott & Associates, Inc., finds the City of Kenai a feasible location for a Challenger Center in Alaska. Endeavoring to provide all of Alaska's students with access to programs from the Challenger Center for Space Science Education in Alexandria, Virginia, this proposal uniquely incorporates the latest technology in distance education delivery. The committee envisions using multi-media, video and telecommunications technology to overcome distance barriers through an electronic classroom.

The center's primary market is students, grades 4-12 and their teachers. Seventy-three percent of Alaska's 82,764 public school students in this age group live on the highway system; most no more than a half-day's drive from Kenai. In 1995, over 9,000 students from other school districts participated in interscholastic sports activities on the Kenai Peninsula. More than 7,000 students participated in field trips to Homer's Pratt Museum last year, some coming from as far away as Fairbanks in interior Alaska. The maximum academic audience to be generated in the 180 day school year is estimated to be 14,400 students. Almost 50%, or 7,035 of the maximum potential students users reside in the Kenai Peninsula Borough School District. The cost per student is anticipated to be no more than $10-12.

Use of the facility by Alaska's visitors provides another strong revenue market. Trends established since a baseline tourism study in 1990, show strong growth and a $11 million increase in tourism related sales. At $12 per person for a mini-flight 4,000-4,412 visitors would provide $50,000 in revenue the first year of operation.

Budget scenarios for operation of the Challenger Center show that by the third year, when expenses stabilize and revenues level off, revenue out paces expenses by a comfortable margin. During the first year and part way through the second, when marketing efforts take hold, the facility will require a subsidy. The projected number of revenue producing facility users during the first and second year have been stated in the lower ranges in order to provide a conservative view of revenue projections.

The City of Kenai's extensive experience in public facility development and ownership provides a solid rationale in support of a similar arrangement for the Challenger Center. The Kenai Senior Center, the Federal Aviation Administration building and the Kenai Visitor and Cultural Center are all owned by the city and operated under contract provisions with private, government or non-profit outside entities. Recognizing the initial cash requirement to capitalize the facility, the steering committee recommends the city construct and own the Center's building and further recommends that management of the facility be contracted through the University of Alaska. The proposal is logical for several reasons: 1) the land selected for

the center's site (Baron Park Subdivision Part 7, Tract A-1) is already leased from the city to the university for a training campus; 2) the Mining and Petroleum Training Services Center, an extension of the university, already resides on the site, 3) the University of Alaska Anchorage, Kenai Peninsula College Campus, located less than eight miles from the proposed site, is staffed with 26 full-time and 90 adjunct faculty offering a full spectrum of general education courses including a four year education degree; 4) the City of Kenai has the capacity to provide interim funding for the facility's development and construction phase, and 5) the City of Kenai has the ability to attract a wide variety of private and public dollars in order to capitalize the construction.

It is expected that the proposed 13,000 square foot facility to house the Challenger Learning Center, an electronic classroom for seating a 100 people and an inter-active science and technology exploratorium will cost $3.5 million if constructed in 1998. This cost includes $750,000 for the Challenger Learning Center simulator package. The core funding for building the facility will be drawn from state agencies, corporate donors, municipal government and through state legislative support. In other Challenger Centers across the nation, corporate sponsorship has been successfully solicited from companies contracted and sub-contracted by the National Aeronautics and Space Administration to build spacecraft. Companies doing business in Alaska with the Poker Flats Rocket Launch Facility or with the Kodiak Satellite Launch Facility will be considered important potential partners. Debbie Sedwick, Assistant Commissioner, Department of Commerce and Economic Development and Pat Ladner, Director of the Alaska Aerospace Development Corporation have pledged their assistance in identifying potential corporate partners. A high profile fundraising committee will be appointed upon receiving the prestigious Challenger Center designation for Alaska.

The benefits of bringing the Alaska Challenger Learning Center to Alaska and the Kenai region are numerous, including:

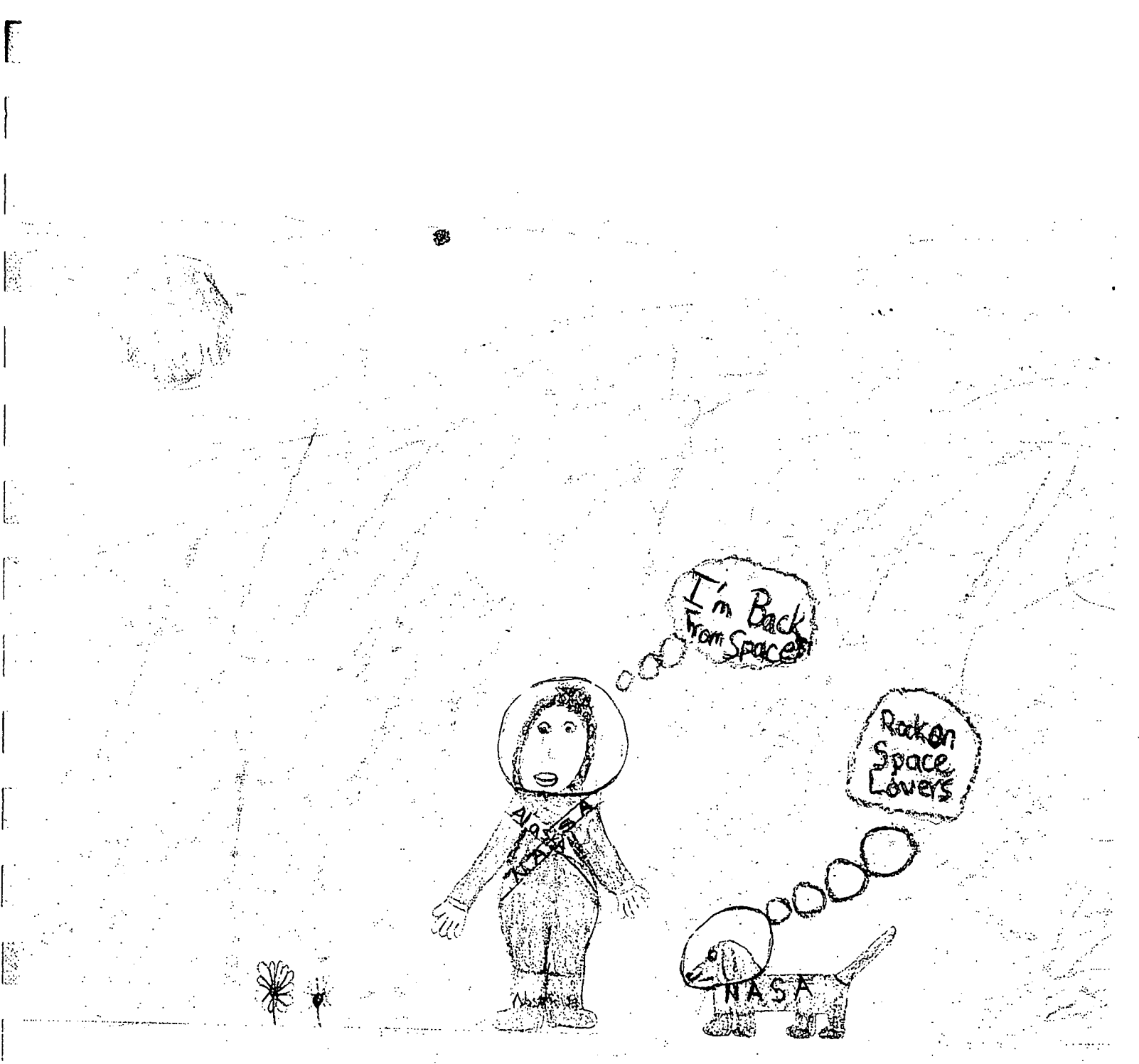
- through the proposed electronic classroom, many Alaskan students who might not otherwise participate in the Challenger Center experience, will have the opportunity.

- students of the peninsula will enjoy the opportunity for frequent visits to the center due to its close proximity.

- our students, statewide, can improve knowledge and skills in the areas of science and math while learning valuable team building/problem solving skills.

- the center provides an opportunity to engage visitors in activities other than those that impact our wilderness resources and environment while increasing the potential for business income from retail sales of food, gas and lodging.

The Alaska Challenger Learning Center Steering Committee concludes that sufficient opportunity exists, through the creation of this facility to recommend that the City of Kenai process an application for designation as the Challenger Learning Center's site in Alaska. Preliminary review by the Challenger Center for Space Science Education of the committee's rationale and recommendations has resulted in an invitation to submit the City of Kenai's application for site designation to the national board in April, 1996.



Krista Collinson
Grade 5
Soldotna Elementary School
Soldotna, Alaska

Introduction

Millions of children are deciding during their elementary years that they have no interest in science, math or technology. By the year 2,000 America will have a critical shortfall of over half a million chemists, biologists, physicists and engineers. By the same year, 85% of all new workers will be women, minorities and immigrants, yet few from these groups currently consider science or engineering as career choices. Every year, business spends over $30 billion to train and retrain employees lacking basic math, science and reading skills.

Using space exploration and its applications here on earth to capture the imagination of young people and educators has proven benefits. Challenger Center offers dynamic and exciting educational programs that positively impact efforts in education reform. These programs focus on the critical school years when lifelong attitudes are formed.

A network of high technology spaceflight simulators enable students to apply science and math concepts to real-life situations and problems. Each simulator, known as a Challenger Learning Center, houses an operating, hands-on module of the National Aeronautics and Space Administration (NASA) Mission Control Center and a Space Life Station capable of serving 20,000 individuals per year. Access to the Challenger Center network would connect Alaskans intra and interstate (via satellite teleconferencing and video-conferencing) providing students with simulated experiments, access to role models and high-tech learning[1].

This report has been written for multiple audiences: 1) the City of Kenai and the Alaska Aerospace Development Corporation, sponsors of the work, 2) the broad audience of Alaskans interested in expanding our children's and grandchildren's educational potential in math, science, space exploration and leadership development, 3) the Board of Directors of the Challenger Learning Center for Space Science Studies, and 4) for those who want to help create the financial foundation on which the Alaska Challenger Learning Center will be built.

Challenger Learning Centers around the nation are inspiring millions of children to:

- develop self-confidence and abilities in science, math and technology,
- build strong communication and problem-solving skills which enhance their creative and critical thinking ability,
- pursue career interests in science, math and technology.

[1] Challenger Center for Space Science Education

Challenger Center for Space Science Education

Board of Directors

Vance Ablott	President & CEO, Challenger Center for Space Science Education
Laurence Adams	Former President & COO, Martin Marietta Corporation
Gabriel Aguirre	President, SaniServ, Inc.
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Mortimer Zuckerman	Chairman & Editor-In-Chief, *U.S. News & World Report*; Chairman, Boston Properties

The Challenger Center network is directed by the Challenger Center for Space Science Education in Alexandria, Virginia.

"The mission of Challenger Center is to spark in our young people an interest--and a joy--in science. A spark that can change their lives--and help make American enterprise the envy of the world."

President George Bush

On January 28, 1986, the space shuttle Challenger took flight for the twenty-fifth space shuttle mission. The objective, to broaden the educational horizons of students and to promote the advancement of scientific knowledge. The mission ended in tragedy minutes into its flight with the loss of all seven crew members.

In the aftermath of the Challenger accident, family members of the crew committed themselves to a vision: to continue the crew's mission of teaching students and educators to learn, to explore, and to inspire. Their inspiration became Challenger Center for Space Science Education.

The family members joined with friends, educators, and members of the business and political communities and together they shaped a vision. The site of the first Challenger Learning Center opened in 1988 at Houston Museum of Natural Science in Texas. Since then, the network has spread across the United States and Canada, joining schools, museums and universities into a unique partnership where together they provide students with the experiences of which dreams are made. Now, keeping the principle of exploring new frontiers alive, many Challenger Learning Centers are expanding to include learning opportunities for all ages using space simulated flight for improvement in communication, leadership and team building skills.

The founders of the Challenger Center for Space Science Education established this statement defining their mission:

Challenger Center for Space Science Education
Mission Statement

Challenger Center uses space exploration as a theme to create a positive learning experience that raises students' expectations of success; fosters in them a long-term interest in math, science and technology; and motivates them to pursue studies in these areas.

In 1992, a survey conducted by the Challenger Center for Space Science Education was administered to students in seven locations across the country following their class participation at Challenger Learning Centers. 1,598 students responded to the survey[2] which asked open-ended questions. The results show the experience to have been overwhelmingly positive. Fifty-nine percent gained a better understanding of themselves. Thirteen percent of all the students learned how to communicate in a better fashion and acquired a better understanding of teamwork. Fifty-one percent of the females surveyed and forty-nine percent of the males ranked science and technology as their first choice of career fields following their Challenger Learning Center experience.

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[2]Department of Education, 1992 Naitonal Eisenhower Grant, Challenger Center Focus Group Student Survey Report.

Challenger Learning Centers provide students and teachers with a unique educational experience. Much more than just a day trip, the Challenger Learning Center mission is a classroom simulation beginning long before visiting the Challenger Learning Center. The classroom portion of the experience begins four to six weeks prior to the mission date. In order to prepare their students, teachers participate in a full day of training prior to presenting the program to their classes.

There are twenty eight Challenger Learning Centers throughout the United States and Canada. On the west coast, four centers serve multitudes of students of all ages in Seattle, Washington; Los Angeles (Dominguez Hills) and San Diego, California and Kapolei, Hawaii. Since the steering committee was formed in November, some of the members have visited Challenger Centers while on business or pleasure travel outside Alaska. Kathy Scott, Dennis and Ginger Steffy visited the Seattle center; Duane Bannock observed a mission at the Dominguez Hills center and Mayor Williams visited the Washington, D.C. site. City Manager Tom Manninen also recently observed training at the Washington, D.C. Challenger Center. A full list of Challenger Learning Centers is found in the appendix of this document.

To join the network of Challenger Learning Centers, a community must prepare an application and business plan for consideration by the Challenger Center for Space Education Board of Directors. Working with Annie Roskell, Regional Manager for the Challenger Center for Space Education, the Alaska Challenger Learning Center Steering Committee has prepared this feasibility study. After the national board grants an operating license to the site, a four-phase development process begins.

The Alaska Aerospace Development Corporation (AADC), created to develop aerospace-related economic and technical opportunities for the State of Alaska, unites with the City of Kenai in providing this analysis of the Challenger Learning Center for Alaska. In 1995 the Alaska State Legislature authorized[3] AADC to conduct a feasibility study in conjunction with interested municipalities. The City of Kenai and the Alaska Aerospace Development Corporation joined together in production of this report to examine the feasibility of placing the Alaska Challenger Learning Center in Kenai, Alaska.

The City of Kenai is keenly interested in locating the Challenger Learning Center within the community. In November, 1995 the Kenai City Council initiated the feasibility study to determine: 1) if the Alaska Challenger Learning Center would be a valuable economic asset to the City of Kenai; and 2) if the center would be capable of sustaining its own expense by the third year of operation. The council recognizes that sufficient technical and operational support services exist in our area to sustain a successful operation while meeting the needs of the State of Alaska. The firm of K. Scott & Associates, Inc. of Kenai, Alaska was contracted to facilitate the work of the steering committee.

[3]Alaska State Legislature House Bill 315(Fin)

When the committee's shared vision for the Alaska Challenger Learning Center emerged, it became clear that the Challenger Center needed to be the anchor for a facility with a broader purpose. In order to: 1) develop a plan for self-sustaining revenue, 2) make the center accessible to all Alaskans, and 3) meet a statewide need for a communications network learning center, and 4) address the community need for classroom rental and meeting space, the steering committee recommends a multi-purpose facility. The structure, a realization of the committee's shared vision, will house the Challenger Learning Center, an electronic classroom and a science and technology exploratorium. The steering committee recommended naming the facility the Science and Industry Institute of Alaska and defined its mission in this statement:

Alaska Challenger Learning Center Steering Committee
Mission Statement

The Science and Industry Institute of Alaska (SIIA) serves as an educational center. The institute uses innovative technology to foster learning in mathematics and science, and to improve communication and leadership skills for all ages. The Alaska Challenger Learning Center, the cornerstone of SIIA, uses interactive lessons on space exploration for instruction. The foundation of the SIIA is built on partnerships with industry, government and education.

Since November, the steering committee met frequently in full committee and subcommittee meetings. Volunteers spent approximately 460 hours of personal time developing and presenting their shared vision for the Alaska Challenger Learning Center in Kenai, Alaska. Committee members presented their ideas about the Challenger Center to well-attended gatherings of the Kenai Rotary, Kenai Peninsula Borough School Board, Phi Delta Kappa, the Economic Development District Board, Kenai, Soldotna and Nikiski Chambers of Commerce, Kenai City Council and on KSRM Radio's talk show, "Sound Off." A four color brochure designed by Rene Azarra was produced and distributed at the presentations. The committee is prepared to make presentations state-wide in future phases of the project. Volunteers created, set-up, manned and dismantled the Challenger Center booth, one of over 100, at a recent community trade show called the Village Fair. The booth was a hit with children and adults alike.

The committee's work in preparing to submit an application for approval as a Challenger Learning Center focused on six primary areas: 1) facility location and design; 2) programs; 3) audience and market; 4) ownership and operation; 5) capital cost, and 6) economic impact to the central peninsula area. To process the work of the feasibility study, four subcommittees were created: Mission Launch Committee (program and facility design), Mission Control Committee (operation, budget and ownership), Communications Committee (education and communication about the project) and the Capital Committee (development of capital funding strategies).

Alaska Challenger Learning Center Steering Committee

Rene Azzara	•Adm. Assistant, Mining & Petroleum Training Service, UAA •Computer graphics designer •Tourism marketing background •Parent
Duane Bannock	•Kenai City Councilman •New & used car sales •Lifelong Alaskan •Parent
Jan Bobek	•BA, Elementary Education & Psychology •MA, Special Education •Challenger Learning Center trained classroom teacher •Instrument rated Civil Air Patrol pilot
Kim Booth	•Executive Director, Kenai Visitor and Cultural Center •Treasurer, North Pacific Volcano Interpretive Center •Former member KPBSD Vocational Education Adv. Committee •Kenai Townsite Historic Board member
Walter E. Bromenschenkel	•Superintendent, Kenai Peninsula School District •Ph.D., Education •Former Coordinating Principal, U.S. Dept. Defense, Seoul, Korea •Parent
John Dahlgren	•Assistant Superintendent of Schools •Master Education /BA Biology & Physics •9 years classroom /20 years education administration •Parent
Aleja DeVito	•Economist, Kenai Peninsula Economic Development District •Master Economics, BA, Agriculture & Business •Financial analyst/demographic profiles •Parent
David Feldman	•BS & MS, Physical Science •High school & college science teacher •Rocket Propulsion Laboratory, Edwards Airforce Base •Parent
Ellen Hallmark	•Adjunct Professor, Mining & Petroleum Training Service, UAA •20 years , Retired Master Sergeant, Air National Guard •Member Kenai Flotilla, U.S. Coast Guard Auxillary •Parent & grandparent
Lance Hallmark	•Adjunct Professor, Mining & Petroleum Training Service, UAA •20 years active duty service, Retired Master Sergeant, USAF •Member, Kenai Flotilla, U.S. Coast Guard Auxillary •Parent & grandparent
Marion Nelson	•Development Director, KDLL Public Radio •Governor's Appointee, Alaska Tourism Marketing Council •Kenai Peninsula Tourism Marketing Council Board •Parent & grandparent

Donna Peterson	•Ph.D., Education Curriculum & Instruction •Principal, National Blue Ribbon School/technology innovation •Published writer of educational technology articles •Parent
Dennis Steffy	•Director, Mining & Petroleum Training Service, UAA •Former Kenai Central High School teacher •BS and MS Physics •Parent & grandparent
Ginger Steffy	•Director, UAA, Kenai Peninsula College •MS Physics, former college physics instructor •Chair, 1996 Campaign, Kenai Peninsula United Way •Parent & grandparent
Mike Tarr	•Station Manager, Federal Aviation Administration, Kenai •BA, Communications & 18 years aviation experience •Little League Baseball Manager •Parent
John Williams	•Mayor, City of Kenai, 10 years •Private business owner •17 year instrumentation/automation instructor, UAA-KPC •Parent & grandparent
Kathy Scott	•Project Facilitator & Owner, private consulting firm •Kenai Peninsula School District Strategic Planning Team •Vice President, Kenai Peninsula United Way •Parent & grandparent

In association with:

Pat Ladner, Executive Director
Dave Sadlowski, Assistant Director
Laura Gould, Business Manager
Elaine Test, Executive Secretary
Alaska Aerospace Development Corporation
Anchorage, Alaska

and

Daniel A. LaBry, Vice President, Marketing
Annie Roskell, Regional Director
Challenger Center for Space Science Education
Alexandria, Virginia

Challenger Center's Place in Alaska

Challenger Centers are located throughout the United States and Canada in communities ranging in size from two thousand to 2.3 million people. Alaska's population, currently 615,900, is twice the size of the average Challenger Center community. The entire population of the state of Alaska is considered a viable audience to be served by the Challenger Center because of the unique technology applications proposed by the Alaska Challenger Learning Center Steering Committee. For purposes of this study, it is assumed that the percentage of target school age students in Alaska is similar to the national average. In Alaska there are 82,764[4] public school students in grades 4 through 12; 73% or 60,104 live on the state's road system. The current public school population reached 124,474 in 1994, demonstrating a pattern of continual increased enrollment over the last 20 years.

Education is no longer confined to the classroom or to one particular location. Through technology, currently the INTERNET, educators, students, parents, scientists, and virtually anyone in the world may interact and access information with the speed and ease that could only be imagined in the past. As responsible planners and concerned citizens, the steering committee recognized early that the Alaska community in which the Challenger Center is located must address the issue of access by all Alaskans. Considering the vastness of our state and the geographical wide-span of our sparse population, the obvious solution to reaching all Alaskans is found in the application of modern technology. Combining the best of Alaska's technology in order to share the benefits of Challenger Center learning with all of Alaska's schools sets this proposal in a class of its own.

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[4]School District Enrollment as of October 1, 1994, Alaska Department of Education, Office of Data Management.

The Community of Kenai

The community of Kenai is located at the mouth of the Kenai River on the Kenai Peninsula. A southcentral Alaska region covering 25,600 square miles (bigger than Rhode Island, Connecticut, Massachusetts and New Hampshire combined), the peninsula is surrounded by the coastal waters of Cook Inlet and the Gulf of Alaska. The region's total population is 47,101[5]. In July our days are long, nearly 19 hours, accompanied by mild temperatures ranging from +65 to +52 degrees fahrenheit at night. December temperatures range from +22.5 to +10 degrees fahrenheit. The annual precipitation is approximately 16 inches.

Kenai, sixth largest community in the state and largest on the peninsula, is home to 7,006 Alaskans and provides services to an additional 25,000 permanent residents within a twenty-five mile radius. The community's population swells to over double in the intense weeks of the summer visitor and commercial fishing seasons. Travel time to Kenai, from Anchorage is 3 hours by road and 20 minutes by commuter plane. Kenai's municipal airport records from 25 to 30 commuter flights per day. The airports 1995 records show 130,000 enplanements. The airport's runways will accommodate charter aircraft such as Boeing 727s and 737s. One of three fully automated Federal Aviation Administration (FAA) Flight Service Stations serves Alaska's many private and commercial pilots from Kenai.

The economy of Kenai is varied and diverse, providing jobs for its residents in the areas of services and retail, tourism, commercial fishing and petroleum extraction and processing. It was here, in the Swanson River Oil Field some 38 years ago, that the oil-based economy of the State of Alaska was first born. Ten fish processing plants operate within the Kenai area serving the Cook Inlet fishing fleet by processing sockeye, king, chum, silver and pink salmon. Tourism growth has skyrocketed. In the last five years independent and package-tour travelers have increased steadily. The Kenai Visitor Center recorded 63,500[6] visitors during 1995, an increase of 8.8% from the previous year, and over double the number of visitors seen in 1992, the first year of operation. The Alaska Department of Labor recently reported that the Kenai Peninsula's economy was distinguished in its diversification[7]:

> "The next decade for the Kenai Peninsula is going to mirror the employment sector changes that are occurring across Alaska. High paying oil jobs are slowly giving way to lower wage service sector jobs. Diversification may allow the borough to weather these changes with less turbulence than other areas of the state."

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[5]Lisa Parker, Planning Director, Kenai Peninsula Borough

[6]Peninsula Clarion Special Section Report, Diversity, the Kenai Peninsula Economy, February 23, 1996.

[7]Alaska Economic Trends, Alaska Department of Labor, February, 1995.

The Kenai Peninsula Borough School District served 10,092 public school students in Kindergarten through 12th grade during the 1994-95 school year. There are 37 schools in 21 different communities inhabited by people of diverse cultural backgrounds. An estimated 350 students are home-schooled and seven elementary/secondary private schools are located in the region. INTERNET users can access the district's home page at this address: http://www.kpbsd.k12.ak.us. Over 9,909 students from across the state came to the Kenai Peninsula last year for interscholastic sporting events.

Selecting the Site

Criteria for selecting a potential Challenger Center site included 1) accessibility from/to main arterials, 2) the opportunity for partnership development, 3) the sufficiency of the land to support the proposed facility now and with future expansion(s) and 4) the potential to receive the land as a gift. A survey of city-owned land identified one parcel available and suitable for development of the Alaska Challenger Learning Center. In view of the opportunity for donation of this parcel from the City of Kenai and the University of Alaska, no other site was explored outside the city limits of Kenai.

The parcel is Baron Park Subdivision, No. 7, Tract A-1 consisting of 40.3 acres. At this time, the parcel is partially developed, serving as the University of Alaska, Mining and Petroleum Training Services training center. The tract, located on Marathon Road within a half-mile of Kenai's main feeder road, Kenai Highway, was leased from the City of Kenai by the University of Alaska in 1991. The university's plans for future development of the site includes location of a FAA regional airliner fire training facility and U.S. Coast Guard approved cold water rescue training center. Four to five acres of the tract is being set aside for development of the Alaska Challenger Learning Center complex.

The site's environmental and archeological history has not been specifically explored for this feasibility study, however, the University of Alaska Mining and Petroleum Training Center Service (MAPTS) received certification from the federal office of the Environmental Protection Agency prior to construction of its facility in 1991[8]. Preliminary archeological investigation of the site was conducted prior to construction of the MAPTS facilities. An assessment of the need for further archeological evaluation will be addressed in phase II of the project.

The site was transferred from the Federal Aviation Administration to the City of Kenai in 1963. All utilities (water, sewer, natural gas, electric and phone cable) necessary for operation of a commercial facility are readily available to the site. Fiber optic cable, important to providing multi-media communication technology, already exists within 1,000 feet of the property. Planned future development of this land, as an extension of the university's campus, appears compatible and consistent with placement of the Challenger Center on this site. A number of other Challenger Centers are located on college campuses.

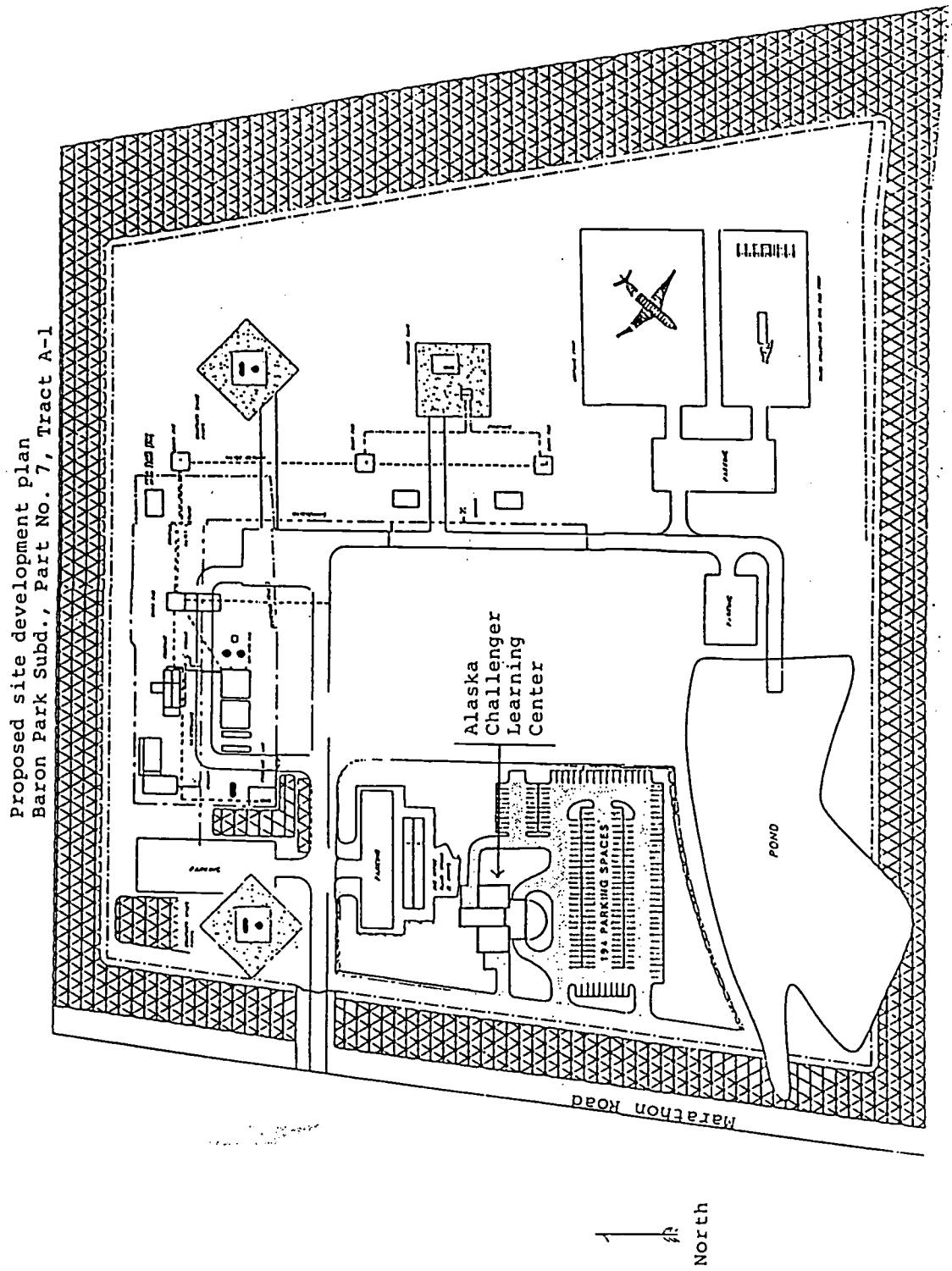
The physical characteristics of the site include a mature, fairly flat, minimal elevation terrain with contours varying a maximum of six feet. There is moderate treeing of mixed deciduous and coniferous vegetation. A man-made pond, dredged to provide gravel for early road construction of the Kenai Highway, lends itself as a potential point of interest for

[8]Dennis Steffy, Director, UAA, Mining and Petroleum Training Services.

landscaping purposes and aesthetic appeal. The facility will likely sit on the north side of the pond. A separate access from Marathon Road to the facility is recommended. Shared parking areas with other site facilities is recommended to maximize site development potential.

Visitor services such as hotel and motel accommodations, restaurants, retail shopping and service stations are within minutes of the Marathon Road site. The Kenai Highway, a four lane paved road, should adequately accommodate any additional traffic resulting from placement of the center at the proposed location. The site is less than a five minute drive from the Kenai Municipal Airport.

The City of Kenai views the project as an economic development opportunity and an occasion to provide Alaskans a high quality educational experience. The city invested all of the funds for the initial feasibility work. Alaska Aerospace Development Corporation has contributed funding for the next phase and the Alaska Industrial Development and Export Authority (AIDEA) has expressed interest in developing the Challenger Center for Alaska. The people of the central Kenai Peninsula have exhibited great enthusiasm for the placement of the Alaska Challenger Learning Center in Kenai.


Proposed site development plan
Baron Park Subd., Part No. 7, Tract A-1
Alaska
Challenger
Learning
Center
POND
Marathon Road
North

Challenger Center Programs

The subcommittee working on design of the facility, first examined the Challenger Center programs in order to develop a facility design responsive to the needs of the users. Challenger Center currently provides four curriculum scenarios for missions in the mission control and space station simulators:

Return to the Moon simulates a lunar landing mission where students will retrace the steps of the Apollo 11 astronauts and prepare for colonization on the moon.

Rendezvous with Comet Halley, which takes place in the year 2061. Students will launch a probe into the tail of the comet and analyze its makeup.

M.A.R.S. - Mission Assignment: Relief and Supply is designed to prepare students for life on the red planet. In this mission, students will travel from a space life station orbiting Mars to a colony already established on the planet. Their counterparts will be returning from the Martian colony to the orbiter.

Mission Earth is the newest Challenger Learning Center mission set in the year 2018 where students will learn that environmental data has indicated that Earth systems are showing signs of rapid change, and they will investigate how they might work to make these changes positively affect the future of our planet.

The teacher's instructions and student materials are provided by Challenger Center for the class in preparation for the mission. Teacher training is a vital element in Challenger Center educational programs. To ensure that teachers are properly equipped with the tools they need to instruct their students, teachers receive a full day of training prior to working with their classes.

Challenger Center programs are flexible and adapt to a broad range of teaching and training uses. Some centers supplement the primary training element by providing mini-flights for tourists. Gene Nibbling, Flight Director for Challenger Learning Center at the Museum of Science Industry in Tampa, Florida, says "tour companies sell group packages for visiting the facility and participating in the mini-flights." Individual visitors participate as well on a first come, first service basis. The heaviest visitor use is on weekends during the summer months.

The Challenger Center curriculum integrates teamwork, critical/creative problem solving and responsible decision making into the learning philosophy. It is the integration of these elements that broadens the scope of user groups to include other categories in the center's

audience. The Seattle Museum of Flight contracts use of their Challenger Center to Quantum Leap, a training company in the Seattle area. Quantum Leap uses the facility for full-day corporate training workshops on team building and communication skills. Steering committee member Ginger Steffy, Director, Kenai Peninsula College, was recently the guest of Quantum Leap for a demonstration session at the center. Ginger provided this synopsis of her experience:

> "Using one of the same flight simulations that the school children use, adults were drawn quickly into a participatory role and enjoyed every minute of it. After the mission, the debriefing and discussion drew numerous parallels between the events of the flight and situations encountered in the workplace. Problems were identified, skills and techniques developed, and solutions began to emerge. What I experienced in Seattle demonstrated for me the effectiveness of the Challenger Learning Center as a tool for training a group of individuals from a corporation, organization or board of directors."

Audience and Market Analysis

Potential users of the Challenger Center programs are identified in two basic categories, academic and recreational:

- Academic audience
  - -Public, private and home-school students grades 4-12
  - -Postsecondary students (students and teachers)
  - -Private business, government and non-profit organization leaders and employees
  - -Educators
- Recreational audience
  - -Youth and adult fraternal and service organizations
  - - Families
  - - Visitors

The center's primary market focus is students, grades 4-12 and their teachers. The maximum academic audience during the 180 day school year is estimated to be 14,400 students. Nearly 50%, or 7,035 of the primary market students reside in the Kenai Peninsula Borough School District[8].

According to 1994 public school enrollment figures, a vast majority of target market group live on Alaska's highway system. A solid majority live within a three-hour drive from Kenai. Pratt Museum, an hour and half beyond Kenai reports hosting 7,700 students on field trips last year. Based on this report and the high number of students traveling to the Kenai

[8]Student populations do not reflect those home schooled or attending private schools.

Peninsula each year for interscholastic sports activities it is reasonable to conclude that the Challenger Center could attract sufficient numbers of out-of-district students, providing maximum utilization by the primary market group.

The center's secondary market focus is the large and growing number of annual visitors to the Kenai Peninsula, particularly from mid-May through mid-September. Use by this group is less certain since there are no comparables in the area for attractions requiring paid admission other than the Pratt Museum in Homer. Pratt Museum staff recorded 25,573 visitors May to August in 1995. The Alaska SeaLife Center, to be located in Seward and slated for opening in 1998, projects 284,500 visitors during the first year estimating 130,000 visits will be by Alaskans. The center plans to charge an average of $10 per visitor.

Considering trends in increasing visitor numbers provides assurance of the industry's growth. Kim Booth, Executive Director of the Kenai Visitor and Cultural Center reported over 63,520 visitors at the center between May and September last year, double its opening year visitors of 30,000.

Increases in visitor numbers are implicated in vehicle traffic count analysis more than commuter airline service. The Kenai Peninsula Tourism Report,[9] says that primary users of air service are peninsula residents and business travelers. According to a recent study updating that report, 197,189 or 18% more travelers came to the Kenai Peninsula by car during the 1993 peak summer season than in 1990. The same study shows an $11 million dollar increase in tourism related sales for the same period. The following table demonstrates conservatively, potential revenue based on space utilization for a year in the targeted market areas:

Revenue/Space Utilization Analysis

Group/Period	Min/Max	Flight Time	Participants Low	High	Value
School students: September-May (180 days)	20/40	2-2 hr	7,200-14,400	(@$10 ea)	$72,000-144,000
Visitors: June 10-Aug 15 (50 days peak season)	20	4-1hr	4,000[10]-4,410	(@$12 ea)	$48,000-52,920

[9]Fox Practical Marketing for the Kenai Peninsula Borough Economic Development District.
[10]Represents approximately 4% of the total 1989 non-resident visitors to the Kenai Peninsula.

To establish an admission fee for visitors taking mini-flights two areas were examined: 1) what visitors are charged for similar attractions in south central Alaska and 2) what other Challenger Centers charge visitors.

Admission Price Comparisons

Activity	Adult	Seniors	Youth	Children
	$	$	$	$
Outside Alaska:				
San Diego Zoo	15.00		6.00	
Sea World, San Diego	29.95		21.95	
Alaska:				
Alaska Zoo, Anchorage	6.00	5.00	4.00	3.00
Museum of History & Art, Anchorage	4.00	3.50		
UAF Museum, Fairbanks	5.00	4.50	3.00	
Alaska Experience Theatre, Anchorage	10.00	7.00	7.00	
Imaginarium, Anchorage	5.00	4.00	4.00	
Kenai Peninsula:				
Kenai Performers Events, Kenai	10.00		8.00	
Kachemak Bay, Homer area			15.00	
Pratt Museum, Homer	4.00	3.00	2.00	
Alaska Coastal Studies, Homer area			30.00	
Kenai Fjords Tours, Seward area			35.00	
Alaska SeaLife Center, Seward	********* Average of $10 per person*******			
(Opening planned for 1998)				

Developing a strategic marketing plan targeted at these primary user groups is part of the work identified for the next phase of the project's development. Employing the methods used by other Challenger Centers for attracting educators will be helpful in creating the educator segment strategy. The visitor industry cooperative marketing programs offered by the Kenai Peninsula Tourism Marketing Council and the Kenai Visitor and Cultural Center will likely provide the vehicle for establishing the tourism marketing segment.

Challenger Learning Center
Activity Fee Comparison

	Challenger Learning Center	Audience	Program	Length	Fee
1	Brownsburg	School	Full mission		$450.00
2	Houston, Texas	School	Full mission	2 hr	$200.00
		School	Mini-flight	1 hr	$120.00
		Gen. public	Mini-flight	1hr	$10.00
3	Rochester, New York	School	Full mission		$350.00
		Gen. public	Mini-flight		$15 per person
4	Seattle, Washington	School	Full mission	2 hr	$300.00
		Family flight	Mini-flight	1 hr	$25 per person
5	Lanham, Maryland	School	Full-mission	2 hr	0
6	Dayton, Ohio	School	Full-mission	2 hr	0
		Public Groups	Full-mission	3 hr	$400.00
		Public Groups	All-day		$700.00
7	Richmond, Virginia	School	Full-mission	2 hr	0
		Public Groups	Full-mission	2 hr	$450.00
8	Edmonton, Canada	School	Full-mission	2 hr	$8 per student
		Gen. public			$7 per adult
9	North York (Don Mills), Canada	School	Full-mission	2 hr	$200.00
		Corporate trng	All-day		$750.00
		Gen. public	Mini-flight	40 min	$3 per person
10	San Diego, California	School	Full-mission	2 hr	$210.00
		Corporate	All-day		$900.00
		Member			$25 per person
11	Des Moines, Iowa	School	Full-mission		0
		Public Groups	Mini-flight		$150.00
		Corporate trng		2hr	$500.00
12	Charlotte, North Carolina	School	Full-mission	2 hr	$6 per student
		Gem public			$15 per person
13	Kapolei, Hawaii	School	Full-mission		0
14	Kansas City, Missouri	School	Full-mission	2 hr	$10 per student
		Family	Mini-flight	45 min	$5 per person
15	Needville, Texas	School	Full-mission	2 hr	$200.00
16	Kalamazoo, Michigan	School	Full-mission	2 hr	$200.00
		Gen. public	Mini-flight	45 min	$3 per person

Facility Design

To adequately serve the mixed audience, the steering committee recommends a multi-purpose facility housing the Challenger Center, an electronic classroom and an exploratorium filled with exhibits that invite hands-on interaction. The name, Science and Industry Institute of Alaska, is intended to provide a reference for the building in which the Challenger Center will be located. Future considerations may change the overall facility name to something different.

Challenger Learning Center

Challenger Learning Centers, where the simulated space missions are conducted, are designed to be installed as part of a larger institution, be it a school, museum or other entity. Renovated or newly constructed spaces house the Challenger Centers, and Challenger Center works with sites to create a site-specific design to fit the designated area. Mission control and the space station, combined, require a minimum of 1,950 square feet.

The Electronic Classroom

Removing the barrier caused by distance for all Alaskans to use the Alaska Challenger Learning Center prompted the committee to incorporate the concept of an electronic classroom using multi-media, video and telecommunications technology. The electronic classroom extends the utilization of the center beyond the limits of the physical structure. Fitted with camera equipment, satellite transmission/reception up-linking and down-loading and connected to Internet, the possibilities for engaging and serving the entire community of Alaska in space simulation, science or technology education are numerous.

The potential for this multi-media telecommunication conferencing area are many. Some of the ideas the committee discussed included small conferences and group meetings, facilitation of statewide telecommunications networks, use as a presentation/lecture hall and rented classroom space. The University of Alaska Mining and Petroleum Training Services stated a need for media equipped classroom facilities on a regular basis.

The Exploratorium

An exhibit area for interactive science, technology and industry displays is envisioned. The display area would appeal to all institute users, but would be particularly useful in relationship to visitors who intend to engage in a mini-flight. The flights require a number of people to operate and the exploratorium would serve to educate visitors about the center and the technologies of industry and science.

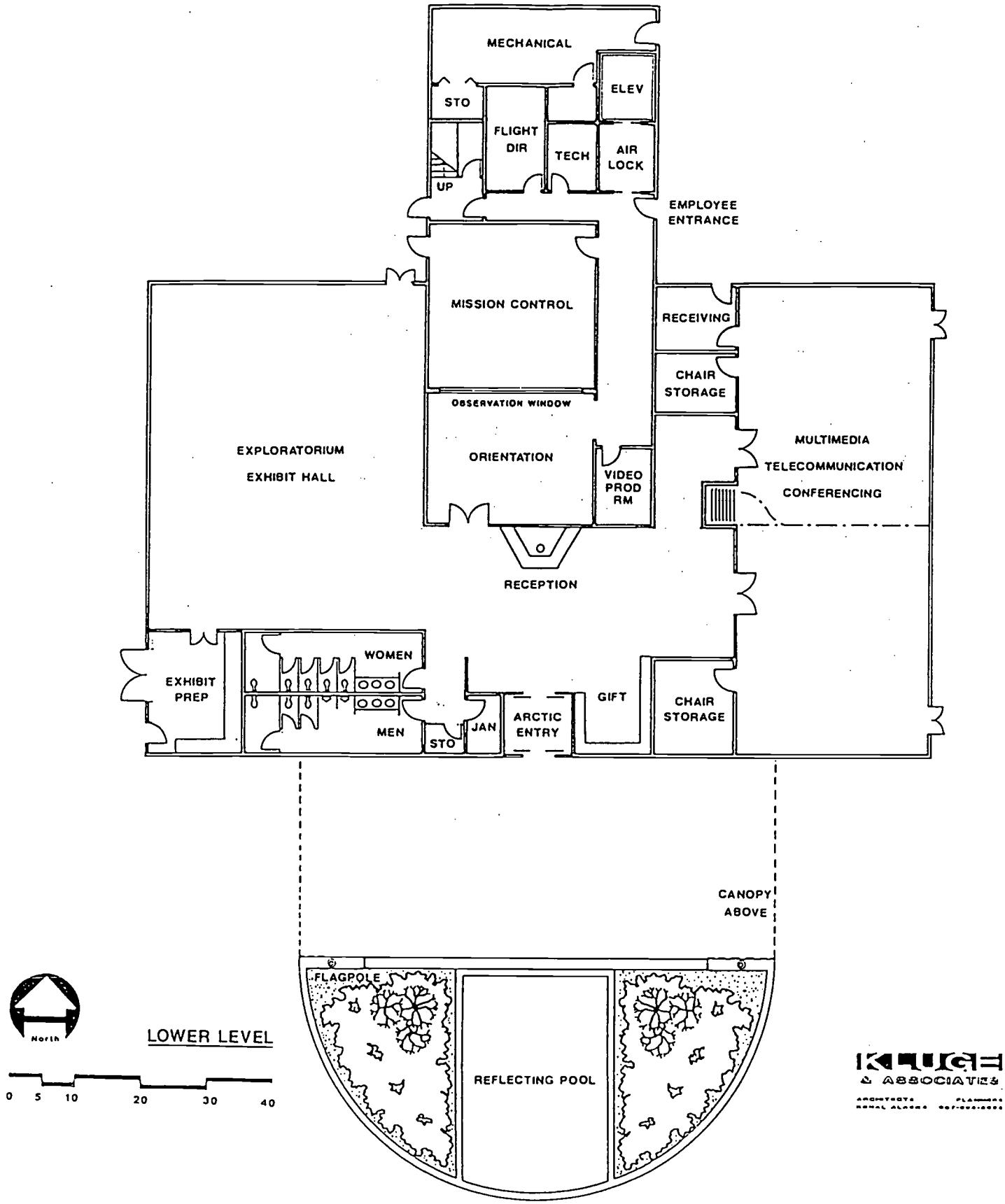
The development of corporate partnerships through sponsored displays makes this space an important investment toward employing the partnership concept in the institute. Additionally, the exploratorium may be the only part of the institute that addresses the needs of pre-school children and students grades K through 3. Traveling exhibits from places like the Imaginarium, a non-profit organization providing science experiences based in Anchorage, would be housed in the exploratorium.

The space would be organized into these primary areas:

- the Challenger Learning Center
- the electronic classroom
- a "hands-on" interactive exploratorium developed on the subjects of science, technology and industry
- reception area, retail space, storage, light food service and office space

Other public buildings in this size range are Homer's Pratt Museum, the Kenai Visitor and Cultural Center and the Kenai Federal Aviation Administration Building. The committee recommends the facility's overall design be basic and simple allowing for future expansion as interest in program grows.

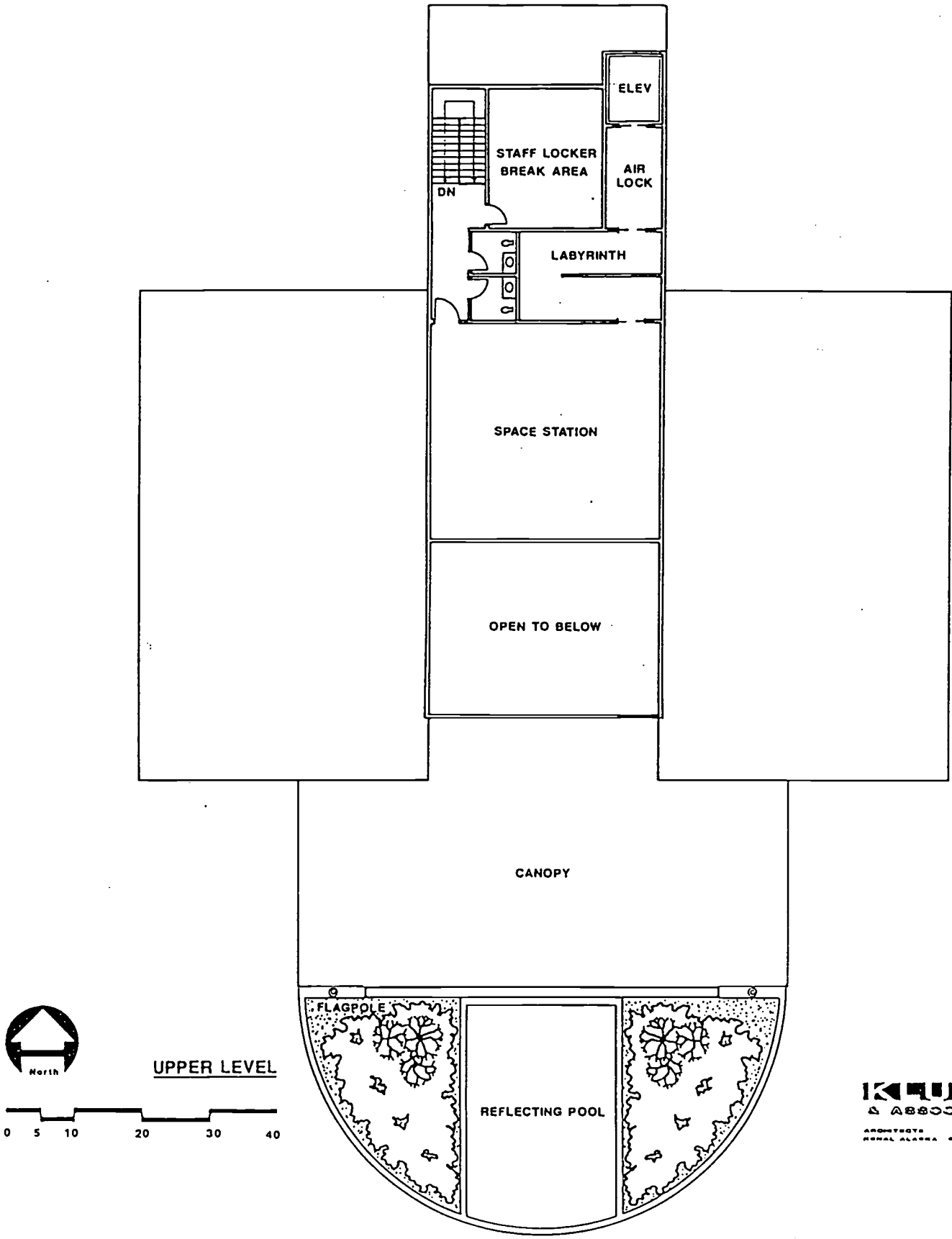
ALASKA CHALLENGER LEARNING CENTER
Challenger
CENTER



KAUDE & ASSOCIATES

ALASKA CHALLENGER LEARNING CENTER

City of Kenai



KRUEGER & ASSOCIATES
ARCHITECTS PLANNERS
KENAI, ALASKA

The Facility's Owner and Operator

The City of Kenai's extensive experience in public facility development and ownership provides a solid rationale in support of a similar arrangement for the Challenger Center/Science and Industry Institute of Alaska. The Kenai Senior Center, the Federal Aviation Administration building and the Kenai Visitor Center are all owned by the city and operated under contract provisions with private, government, or non-profit outside entities.

Recognizing the initial cash requirement to capitalize the facility, the steering committee recommends the city construct and own the center's building and further recommends that management of the facility be contracted through the University of Alaska. The proposal appears logical for several reasons: 1) the land selected for the center's site (Baron Park Subdivision Part 7, Tract A-1) is already leased from the city to the University for a training campus; 2) the Mining and Petroleum Training Services center, an extension of the university, already resides on the site, 3) the University of Alaska Anchorage, Kenai Peninsula College Campus, located less than eight miles from the proposed site, is staffed with 50 full-time and 150 adjunct faculty offering a full spectrum of general education courses including a four year education degree; 4) the City of Kenai has the capacity to provide interim funding for the facility's development and construction phase, and 5) the City of Kenai has the ability to attract a wide variety of private and public dollars in order to capitalize the construction.

Affiliation of the Challenger Center with the University opens access to a consortium of networks throughout the state. On the local front, the Bachelors of Education degree program could provide individuals interested in assisting the center's staff as interns or volunteers potentially reducing personnel costs. From a statewide perspective, the center could serve as a stabilizing influence and anchoring device for the tenuous Alaska Space Ventures (previously Alaska Space Camp). In 1993, the camp attracted students in grades 6-8 to Fairbanks for one week in the summer. In 1994, a series of 3 one-week long camps brought target age students to Fairbanks twice and to the Matanuska Valley once. The camp was not held in 1995, and the future of the program, fostered by Neil Brown, former manager of the University of Alaska Fairbanks Poker Flats Research Range, is uncertain.[11] Part of the committee's vision includes developing and hosting camps like these during the summer months. The collaborative potential through a proposed operating arrangement with the University of Alaska probably exceeds our expectations.

[11]Interview with Joe Hawkins, Alaska Space Grants Program

Expense of Operating

The operating budget plan includes two full-time, twelve month positions performing the duties of flight director and assistant flight director hired as employees of the University of Alaska. These management level positions will oversee all aspects of administering the center's operation as well as conducting the mission flights. Qualifications for the flight director would exceed those of the assistant. Many of the flight directors possess master of science degrees. During the summer months a receptionist is recommended to assure smooth transitions by individuals and groups using the facility. Trained volunteers will be used to supplement the management staff and an active volunteer committee or board will serve as advisors to the university on policy, oversight and growth.

Annual budget scenarios for the first, second and third years appear on the following pages. In addition to the usual fixed operational cost for utilities, communication, janitorial services, maintenance, supplies and promotion, the center will pay license fees of $10,000 annually to the Challenger Center for Space Science Education. Licensing with the national center provides for use of the Challenger Center name, 24-hour technical support, access to the Challenger multi-site electronic network, flight director training and an annual supply of training and scenario-specific activity books.

In order to meet major maintenance expenses when the facility ages, the committee recommends a reserve account be funded annually until the fund reaches 10% of the facility's value. The city, as owner, will be asked to provide some facility and parking lot maintenance.

In the center's start-up year, approximately $13,500 is needed for office equipment purchases. These one-time costs are not reflected in subsequent annual budgets. Corporate sponsors will be approached to provide for the exploratorium's interactive displays.

Revenues from Programs and Rentals

Revenue will be generated from all programs used by academic and recreational audiences. By the second year, over 50% of the revenue will come from the primary target audience, students grades 4-12. The center's second largest producer of revenue, the summer visitor market, is followed by group use and electronic classroom rental. In the budget scenarios that follow, a conservative 5% increase in visitors each year and a 25% increase annually in student use produce a positive, self-sustaining cash flow by the third year of operation. Fees for electronic access to the center and other facility uses will be further developed in the next phase of the facilities development.

First Year Budget

Revenue	Unit Price	No. of Units	Total
Classroom(s)/students grades 4-12	$10.00	7,000	$70,000.00
Corporate training (half-day)	475.00	4	1,900.00
Corporate training (full-day)	1,000.00	4	4,000.00
Visitors (1-hour mini-flights)	12.00	4,000	48,000.00
Space camps	350.00	3	1,050.00
Families & other groups	100.00	25	2,500.00
Scouts & other youth organizations	150.00	10	1,500.00
Electronic classroom rental	500.00	30	15,000.00
Gift shop concession space lease	320.00	12	3,840.00
Total program revenue			$147,790.00
Subsidy required			$65,390.00
Total revenue			$213,180.00
Expense			
Personnel:			
Flight Director (12 mos. w/benefits)	70,000.00		
Asst. Flight Director (12 mos. w/benefits)	35,000.00		
Reception (3 mos.@$9 per hr. w/no benefits)	4,680.00		
Student intern(s) stipend	2,000.00		
Advisory board/volunteer program	3,000.00		
Flight director travel/training	1,000.00		
Total			115,680.00
Contractual services			
Utilities	20,000.00		
Communications services	12,000.00		
Janitorial	10,000.00		
Challenger Learning Center license fee	10,000.00		
Facility maintenance	10,000.00		
Reserve	2,000.00		
(build reserve to 10% of facility value)			
Total			64,000.00
Commodities & supplies			
Office supplies	5,000.00		
Program materials	10,000.00		
Promotion materials	5,000.00		
Total			20,000.00
Equipment			
Office, standard A/V & Maintenance	13,500.00		13,500.00
Total expense			$213,180.00

Second Year Budget

Revenue	Unit Price	No. of Units	Total
Classroom(s)/students grades 4-12	$10.00	10,500	$105,000.00
Corporate training (half-day)	475.00	6	2,850.00
Corporate training (full-day)	1,000.00	6	6,000.00
Visitors (1-hour mini-flights)	12.00	4,200	50,400.00
Space camps	350.00	3	1,050.00
Families & other groups	100.00	25	2,500.00
Scouts & other youth organizations	150.00	12	1,800.00
Electronic classroom rental	500.00	50	25,000.00
Gift shop concession space lease	350.00	12	4,200.00
Total program revenue			$198,800.00
Subsidy required			$11,630.00
Total Revenue			$210,430.00
Expense			
Personnel:			
Flight Director (12 mos. w/benefits)	73,500.00		
Asst. Flight Director (12 mos. w/benefits)	36,750.00		
Reception (3 mos.@$9 per hr. w/no benefits)	4,680.00		
Student intern(s) stipend	2,000.00		
Advisory board/volunteer program	3,000.00		
Flight director travel/training	6,000.00		
Total			125,930.00
Contractual services			
Utilities	20,000.00		
Communications services	12,000.00		
Janitorial	10,000.00		
Challenger Learning Center license fee	10,000.00		
Facility maintenance	10,000.00		
Reserve	2,500.00		
(build reserve to 10% of facility value)			
Total			64,500.00
Commodities & supplies			
Office supplies	5,000.00		
Program materials	12,000.00		
Promotion materials	3,000.00		
Total			20,000.00
Equipment			
Office, standard A/V & Maintenance	0.00		0.00
Total expense			$210,430.00

Revenue	Unit Price	No. of Units	Total
Classroom(s)/students grades 4-12	$10.00	14,000	$140,000.00
Corporate training (half-day)	475.00	8	3,800.00
Corporate training (full-day)	1,000.00	8	8,000.00
Visitors (1-hour mini-flights)	12.00	4,410	52,920.00
Space camps	350.00	3	1,050.00
Families & other groups	100.00	35	3,500.00
Scouts & other youth organizations	150.00	12	1,800.00
Electronic classroom rental	500.00	75	37,500.00
Gift shop concession space lease	350.00	12	4,200.00
Total revenue			$252,770.00
Expense			
Personnel:			
Flight Director (12 mos. w/benefits)	74,970.00		
Asst. Flight Director (12 mos. w/benefits)	37,485.00		
Reception (3 mos.@$9 per hr. w/no benefits)	5,015.00		
Student intern(s) stipend	2,000.00		
Advisory board/volunteer program	3,000.00		
Flight director travel/training	6,000.00		
Total			128,470.00
Contractual services			
Utilities	20,000.00		
Communications services	12,000.00		
Janitorial	10,000.00		
Challenger Learning Center license fee	10,000.00		
Facility maintenance	10,000.00		
Reserve @1% of revenue	2,527.70		
(build reserve to 10% of facility value)			
Total			64,527.70
Commodities & supplies			
Office supplies	5,000.00		
Program materials	13,000.00		
Promotion materials	3,000.00		
Total			21,000.00
Equipment			
Equipment upgrades	7,000.00		7,000.00
Total expense			$220,997.70
Revenues over expenditures			$31,772.30
Total			$252,770.00

Construction Cost and Funding

Based on the planned 13,000 square foot facility and using a conservative commercial building cost of $150 per square foot and without the benefit of development plans, the facility is estimated to cost approximately $3.5 million.

Preliminary Construction Costs

Facility construction	$2,745,000[12]
Challenger Learning Center franchise	750,000
Total	$3,494,070

[12] See appendix for Architect Bill Kluge, Kluge & Associates , letter of March 22, 1996

Challenger Center Franchise Contract
Cost/Timeline

Phase I November 20 - March 31, 1996	•Select facilitator •Activate steering committee •Develop feasibility study and application	
April 3, 1996	•City approval and authorization to submit application to Challenger Center for Space Science Education	
Phase II May, 1996	•Notice of Challenger Center Board application approval	
	•City of Kenai assigns project manager & architect	
Winter, 1997	•Pre-contract planning **Letter of Agreement/Deposit**	$ 50,000
Fall, 1997	•Timeline finalized •Blue print finalized **Contract payment** (40% less deposit)	230,000
Phase III Spring, 1998	•Site preparation •Educational training development •Hire Flight Director **Contract payment** (30% of $700,000)	210,000
Phase IV Summer, 1998	•Installation of simulators -Carpentry -Electrical •Complete installation **Contract payment** (20% of $700,000)	140,000
	•Staff training •Program debugging •Opening Site sign-off **Contract payment** (10% of $700,000)	70,000
Phase V Late summer or fall, 1998	Grand Opening	
	Total simulator & application fee	$700,000
	2.5% inflation factor	17,500
	Freight & simulator accessories	32,500
	Total simulator cost	$750,000

Project Capital Funding

It is anticipated that the core funding for building the Challenger Learning Center will be drawn from state agencies, corporate donors, municipal government and through state legislative support. In other Challenger Centers across the nation, corporate sponsorship has been successfully solicited from companies contracted and sub-contracted by NASA to build spacecraft. Companies doing business in Alaska with the Poker Flats rocket launch facility or with the Kodiak satellite launch facility will be considered key potential partners.

Corporate sponsorship opportunities exist not only in building the facility but in creating displays and purchasing equipment for use within the facility. Debby Sedwick, Assistant Commissioner, Department of Commerce and Economic Development and Pat Ladner, Director of the Alaska Aerospace Development Corporation have pledged their assistance in identifying potential corporate partners.

The complete list of corporations on NASA's 1995 procurement list is appended to this report. This partial list illustrates potential funding sources for the Challenger Learning Center from within Alaska:

Alaska Industrial Development and Export Authority (AIDEA)
Alaska Science and Technology Foundation (ASTF)
Alaska Aerospace Development Corporation (AADC)
Alaska State Legislature
Corporate Donors
City of Kenai

A high-profile fundraising committee will be appointed upon receiving the prestigious Challenger Center designation for Alaska.

Benefits to the Area and to the State of Alaska

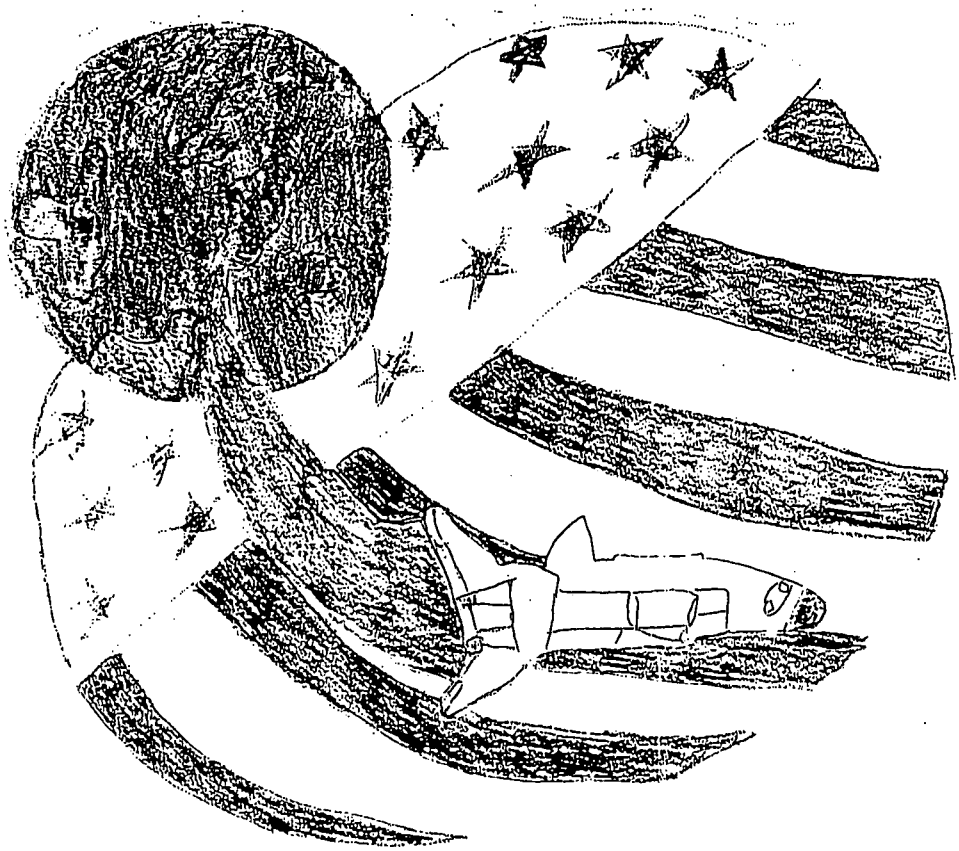
Placing the Alaska Challenger Learning Center in Kenai benefits the entire state of Alaska because of Kenai's commitment to distance delivery of the programs offered by Challenger. The development of a multi-media satellite communications server site in conjunction with Alaska's Challenger Center provides an opportunity for partnership with Challenger Center for Space Science Education in further development of educational distance delivery systems for Challenger Centers nationwide.

Creating the Science and Industry Institute for Alaska wherein the Challenger Learning Center firmly anchors technology, math and science learning is beneficial to students across the state and in our own community. Families, organizations and businesses in Kenai, Soldotna, Nikiski, Sterling, Kasilof and beyond will have access to state-of-the-art technology not normally accessible to the general public. The opportunity for local children, with diverse learning skills, to use the center frequently increases their potential for improved skills in math, science and technology, as well as cooperation, communication and creative problem solving. In these troubled times of youths' apparent pre-occupation with violence and aggression, a facility designed for teaching our children and grandchildren creative problem solving skills may plant the seeds necessary for solving the critical issues of tomorrow.

Economically, the center provides an opportunity to engage visitors in activities other than those impacting our wilderness resources and environment. Although the center is not, by itself, an answer to concerns related to protecting critical salmon spawning habitat in the Kenai River watershed; it will provide an additional or alternate activity for visitors.

Any group or individual using the center from outside the immediate area is likely to spend money for food, gas and lodging. The center's attraction to visitors, whether students or adults, increases our potential for community retail sales. Other educational/tourism attractions planned for this region in the near term include a volcano interpretive center located near the coastal community of Ninilchik, a marine research and educational facility in Seward (Alaska SeaLife Center) and a wildlife refuge visitor center near Homer. This network of educational, interactive attractions provides a strong menu of choices for visitor selection. The effect of multiple attractions will payoff in the increased number of visitor overnight stays, a benefit to the lodging industry as well as increasing the city's income from bed tax revenue.

The committee's conclusion is that sufficient opportunity exists, through the creation of the Science and Industry Institute of Alaska of which inclusion of the Alaska Challenger Learning Center is key, to recommend that the City of Kenai process an application for designation as the center's site in Alaska.



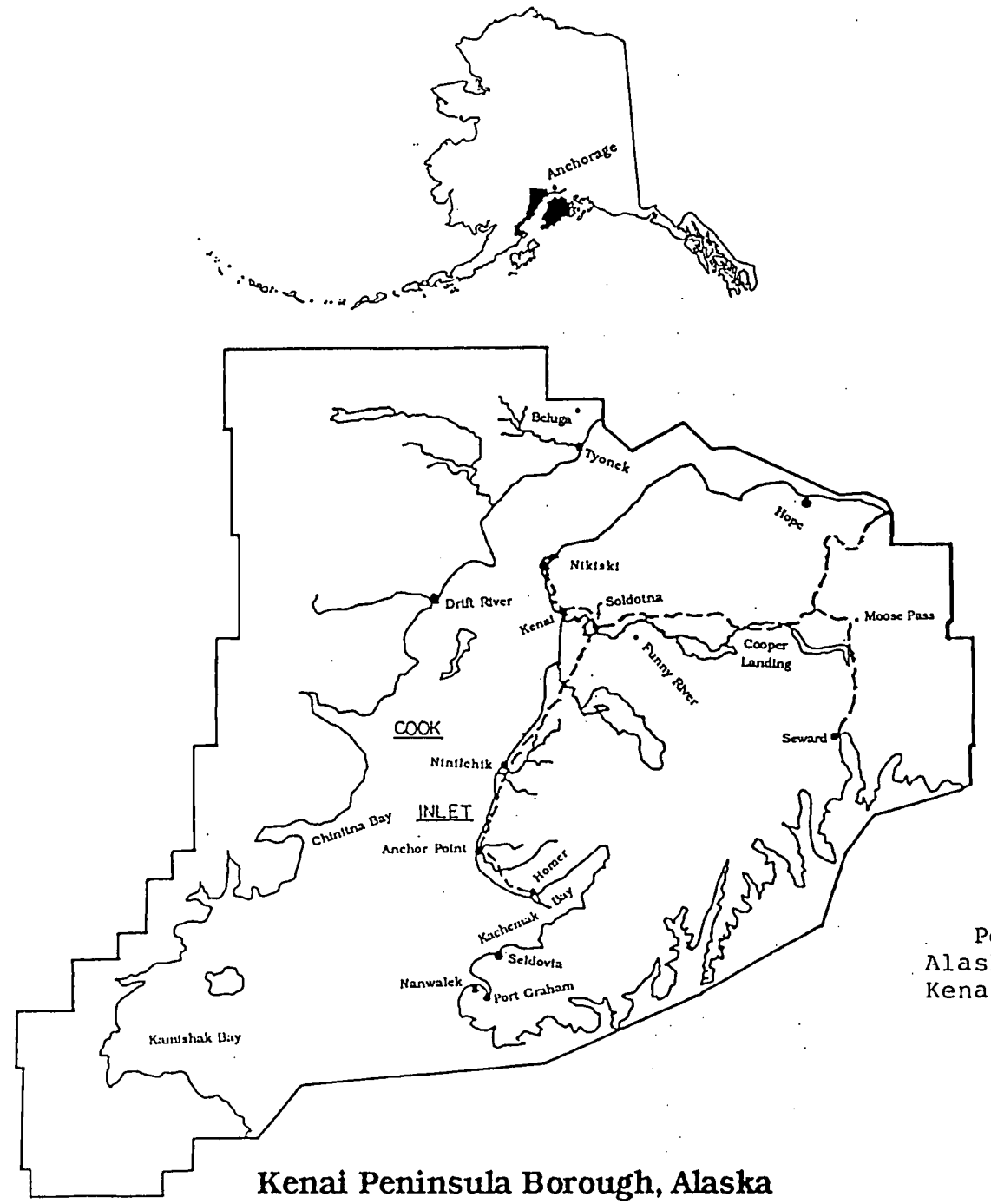
I want to be the first kid to go to space

Christina Marinkovski
Grade 5
Soldotna Elementary School
Soldotna, Alaska

Appendix

Demographic Information

- Alaska & Kenai Peninsula Borough Map
- Alaska School District Enrollment
- Population Comparison, Challenger Learning Centers
- District Interscholastic Sports/Number of Visitors



Population
Alaska 615,900
Kenai Pen 47,101

Kenai Peninsula Borough, Alaska

Alaska
School District Enrollment
as of October 1, 1994

District Name	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12	Totals
Alaska Gateway	44	39	37	50	48	43	31	43	28	363
Aleutian Region	3	3	1	1	1	2	0	2	2	15
Aleutian East Borough	28	29	36	23	38	26	17	10	29	236
Alyeska Central	77	81	75	124	135	235	157	99	103	1,086
Anchorage	3976	3773	3669	3790	3598	3242	3145	3023	2827	31,043
Annette Island	36	33	31	31	34	33	35	33	22	288
Bering	118	117	120	104	99	104	94	91	80	927
Bristol Bay	26	24	17	20	20	18	15	17	18	175
Chatham	26	31	24	25	35	22	20	19	20	222
Chugach	11	7	8	13	8	10	1	10	7	75
Copper River	44	50	56	51	44	48	48	40	38	419
Cordova	50	38	37	42	37	45	35	30	31	345
Craig	40	35	31	36	26	21	25	19	16	249
Delta/Greely	86	73	65	74	83	85	68	60	69	663
Denali	27	30	39	30	40	22	35	26	23	272
Dillingham	51	45	37	30	41	31	34	23	34	326
Fairbanks North Star	1307	1307	1207	1290	1185	1525	1208	849	787	10,665
Galena	10	16	9	9	10	8	6	11	6	85
Haines	33	36	36	32	42	44	31	30	29	313
Hoonah	17	21	15	28	17	24	20	21	10	173
Hydaburg	7	14	8	9	10	5	7	8	5	73
Iditarod Area	31	28	45	33	38	47	33	19	15	289
Juneau	461	446	427	422	414	498	364	307	272	3,611
Kake	16	9	9	8	13	15	9	16	12	107
Kashunamiut	20	18	17	14	15	16	10	14	9	133
Kenai Peninsula	878	836	818	849	782	832	744	667	629	7,035
Ketchikan Gateway	215	240	223	228	233	257	227	191	148	1,962
Klawock	17	14	13	16	16	21	11	13	14	135
Kodiak	237	243	197	188	207	238	213	197	166	1,886
Kuspuk	29	48	31	50	35	37	25	24	28	199
Lake & Peninsula	45	34	57	37	47	28	29	18	22	317

Alaska
School District Enrollment
as of October 1, 1994

District Name	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12	Totals
Lower Kuskokwim	238	253	245	240	196	215	185	182	151	1,905
Lower Yukon	145	146	120	118	92	119	69	81	59	949
Matantuska-Susitna	998	969	978	1024	953	1047	902	769	705	8,345
Mt. Edgecumbe	0	0	0	0	0	81	70	65	50	266
Nenana	13	12	14	8	12	12	15	7	8	101
Nome	58	56	65	59	55	57	53	41	40	484
North Slope	148	156	122	127	115	123	106	56	82	1,035
Northwest Arctic	128	133	143	144	138	119	105	93	80	1,083
Pelican	4	5	7	4	6	0	5	0	1	32
Petersburg	58	71	57	47	60	62	45	48	50	498
Pribilof	20	19	15	11	12	12	7	6	4	106
Sitka	150	153	122	148	149	180	140	101	94	1,237
Skagway	7	7	16	7	11	14	12	11	11	96
Southeast Island	41	39	38	30	26	30	28	23	23	278
Southwest Region	40	45	52	35	42	29	21	25	26	315
St. Mary's	7	16	6	4	8	10	4	5	2	62
Tanana	6	13	6	13	10	7	5	5	5	70
Unalaska	34	33	29	21	21	30	24	22	23	237
Valdez	68	85	80	67	71	83	60	52	46	612
Wrangell	46	36	52	57	53	35	36	39	30	384
Yakutat	17	14	9	10	11	16	11	11	8	107
Yukon Flats	45	28	33	28	39	34	28	16	22	273
Yukon/Koyukuk	56	35	52	60	44	39	42	35	27	390
Yupiit	25	44	18	24	28	21	22	19	11	212
Total students grades 4 through 12										82,764
Total students on highway system										60,104
Percentage target age students on highway system										73%
Total Alaska Public School popoulation K-12										124,474
Source: State of Alaska, Department of Education, Office of Data Management										

Challenger Learning Centers
Population Comparison

San Diego, California	2,348,417
Houston, Texas	1,629,902
Jacksonville, Florida	635,230
Edmonton, Alberta	626,999
Alaska State Population	615,900
Washington, D.C.	606,900
North York (Don Mills), Ontario	563,270
Seattle, Washington	516,259
Kansas City, Missouri	434,829
Charlotte, North Carolina	395,925
Tampa, Florida	280,015
Rochester, New York	230,356
Baton Rouge, Louisiana	219,531
Richmond, Virginia	202,798
Des Moines, Iowa	193,189
Dayton, Ohio	182,015
Columbus, Georgia	178,681
Chattanooga, Tennessee	152,393
Bridgeport, Connecticut	141,686
Columbia, South Carolina	103,477
Carson, California	83,995
Kalamazoo, Michigan	80,277
Framingham, Maryland	64,989
Wheeling, West Virginia	34,882
Paramus, New Jersey	25,004
Lanham, Maryland	16,792
Brownsburg, Indiana	7,628
Kenal, Alaska	7,006
Needville, Texas	2,718
Kapolei, Hawaii	2,000

Kenai Peninsula Borough School District
Interscholastics Sports
Annual Visiting Team Members

	X-C R	Events	Team	Total	SWIM	Events	Team	Total	FOOTB	Events	Team	Total	BB-B	Events	Team	Total
HOMER HS		1	40	40		2	40	80		3	65	195		10	24	240
KCHS		1	40	40		2	40	80		4	65	260		10	24	240
NIKISKI HS				0				0		3	65	195		10	24	240
NIKOLAEVSK				0				0				0		10	24	240
NINILCHIK				0				0				0		10	24	240
SEWARD HS		1	40	40		2	40	80				0		10	24	240
SKYVIEW		1	40	40		2	40	80		4	65	260		10	24	240
SOHI				0		3	80	240		4	65	260		10	24	240
S B ENGLISH				0				0				0		10	24	240
TOTAL				160				560				1170				2160
	BB-G	Events	Team	Total	WREST	Events	Team	Total	VOL. B	Events	Team	Total	HOCKEY	Events	Team	Total
HOMER HS		10	24	240		4	24	96		10	24	240				0
KCHS		10	24	240		4	24	96		10	24	240		10	20	200
NIKISKI HS		10	24	240		4	24	96		10	24	240		10	20	200
NIKOLAEVSK		10	24	240				0				0				0
NINILCHIK		10	24	240		1	12	12		10	12	120				0
SEWARD HS		10	24	240		3	24	72		10	24	240				0
SKYVIEW		10	24	240		4	24	96		10	24	240		10	20	200
SOHI		10	24	240		4	24	96		10	24	240		10	20	200
S B ENGLISH		10	24	240				0				0				0
TOTAL				2160				564				1560				800
	X-C SKI	Events	Team	Total	TR/FLD	Events	Team	Total								
HOMER HS		2	25	50		1	75	75								
KCHS		1	25	25		1	75	75								
NIKISKI HS				0		1	75	75								
NIKOLAEVSK				0				0								
NINILCHIK				0		0		0								
SEWARD HS		1	25	25		1	75	75								
SKYVIEW		3	75	225		0		0								
SOHI		0		0		2	75	150								
S B ENGLISH				0		0		0								
TOTAL				325				450								
TOTAL OF ALL SPORTS			9909													

Source: John Dahlgren, Associate Superintendent of Schools

Letters & Resolutions of Support

UNIVERSITY OF ALASKA ANCHORAGE

OFFICE OF THE CHANCELLOR

3211 Providence Drive
Anchorage, Alaska 99508-8060
(907) 786-1437 – FAX (907) 786-6123
AYCHANC

March 15, 1996

Steering Committee
Alaska Challenger Learning Center
K. Scott and Associates, Inc.
P. O. Box 2488
Kenai, AK 99611

Dear Ms. Scott:

I am writing this letter in support of the City of Kenai's efforts to establish an Alaska Challenger Learning Center in Kenai. The steering committee has proposed putting the facility on a portion of the property that UAA is currently leasing from the City of Kenai. This is the site of the facilities operated by UAA's Mining and Petroleum Training Service. Several of the MAPTS staff are on your steering committee and have expressed strong support for this project.

The Alaska Challenger Learning Center would provide a unique educational experience for the students and teachers of Alaska. I commend the Kenai City Council for its initiative on the project and the Steering Committee for its hard work thus far. I am confident that you will succeed and the University of Alaska anchorage looks forward to working with you on this program in the future.

Sincerely,

Edward Lee Gorsuch
Chancellor

kch

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ALASKA AEROSPACE DEVELOPMENT CORPORATION

February 6, 1996

Mayor John Williams
City of Kenai

Dear Mayor Williams:

As you are aware , the Alaska Aerospace Development (AADC) was created to develop aerospace related economic and technical opportunities throughout the State of Alaska. While our primary emphasis has been developing an orbital launch facility on Kodiak Island as well as satellite tracking facilities in Fairbanks, AADC has also worked toward obtaining a Challenger Learning Center which could provide educational opportunities throughout the state.

Last year AADC received legislation which authorized funding of the Kodiak Launch Complex and development of the Fairbanks Satellite Spacepark. Additionally, this legislation directed AADC to work with communities interested in establishing a Challenger Learning Center to determine the economic feasibility of developing the facility. Having seen the dedication of the Kenai Peninsula Borough and recognizing the leadership the City of Kenai has provided to this effort, it is my pleasure to commit $5,000 to assist in the completion of a jount feasibility study which has been initiated by the City of Kenai.

Thank you for your commitment to this project and your recognition to the value that aerospace education will have on the children of our state. AADC stands ready to assist in your efforts and we look forward to working with you in the future.

Sincerely,

Pat Ladner
Executive Director

Suggested by: Kenai City Council

CITY OF KENAI
RESOLUTION NO. 96-30

A RESOLUTION OF THE COUNCIL OF THE CITY OF KENAI, ALASKA, SUPPORTING THE ALASKA CHALLENGER LEARNING CENTER FEASIBILITY REPORT.

WHEREAS, the Kenai City Council contracted with K. Scott & Associates to compile a report determining the feasibility of building a Challenger Learning Center in Kenai; and,

WHEREAS, the Council also established a Challenger Steering Committee whose membership included professionals and teachers from the local community; and,

WHEREAS, the Kenai City Council commends Kathy Scott and members of the Steering Committee for their efforts in preparing the report; and,

WHEREAS, the Kenai City Council has reviewed the Alaska Challenger Learning Center Feasibility Report and supports its findings that their is sufficient opportunity to apply to the National Board of the Challenger Center for Space Science Education for a Challenger Center site designation in the City of Kenai.

NOW, THEREFORE, BE IT RESOLVED THAT THE COUNCIL OF THE CITY OF KENAI, ALASKA, supports the findings of the Alaska Challenger Learning Center Feasibility Report and directs the submittal of an application for a Challenger Learning Center site designation in the City of Kenai.

PASSED BY THE COUNCIL OF THE CITY OF KENAI, ALASKA, this third day of April, 1996.

John J. Williams, Mayor

ATTEST:

Carol L. Freas, City Clerk

RESOLUTION 95-96-3
KENAI PENINSULA BOROUGH SCHOOL DISTRICT

SUPPORTING ESTABLISHMENT OF A
CHALLENGER LEARNING CENTER IN KENAI, ALASKA.

WHEREAS, the Challenger Learning Center was founded by the families of the Challenger 51-L crew that met with a fatal accident during the Challenger flight to orbit the earth on January 28, 1986; and

WHEREAS, the Challenger Learning Center uses space exploration as a theme to create a positive learning experience raising students expectations of success; fostering in them a long-term interest in math, science and technology; and motivating them to pursue studies in these areas; and

WHEREAS, the City of Kenai and the Alaska Aerospace Development Corporation, through the participation of a citizen steering committee, have cooperatively commissioned the development of a business plan for the Challenger Learning Center located at Kenai, Alaska; and

WHEREAS, preliminary review of the project indicates that the Challenger Learning Center would operate successfully in Kenai, Alaska, and with use of advanced technology provide access to the dynamic learning experience of simulated space flight for all Alaskans; and

WHEREAS, the Challenger Center for Space Science Education has invited the City of Kenai to submit an application for designation as a Challenger Learning Center for Alaska at their April board meeting in Alexandria, Virginia; and

WHEREAS, an expression of support with letters and resolutions is sought as part of the application package for consideration by the Challenger Center for Space Science Education in designating a location in Alaska;

NOW THEREFORE BE IT RESOLVED that the Kenai Peninsula School Board supports the placement of the Challenger Learning Center in Kenai as an asset to the community of the Kenai Peninsula joining the partnership of educators, government officials and private corporations who support this effort in behalf of all Alaskans.

Adopted this 18th day of March, 1996.

Mari Anne Gross

Mari-Anne Gross, President
School Board

ATTEST:
Barbara A. Jewell

Barbara A. Jewell
Notary Public
My Commission Expires 8/27/98.

Introduced by:	Brown, Glick, Navarre
Date:	3/19/96
Action:	Adopted
Vote:	Unanimous

KENAI PENINSULA BOROUGH
RESOLUTION 96-024

A RESOLUTION SUPPORTING ESTABLISHMENT OF A CHALLENGER LEARNING CENTER IN KENAI, ALASKA

WHEREAS, the Challenger Learning Center was founded by the families of the Challenger 51-L crew that met with a fatal accident during the Challenger flight to orbit the earth on January 28, 1986; and

WHEREAS, the Challenger Learning Center uses space exploration as a theme to create a positive learning experience raising students' expectations of success; fostering in them a long-term interest in math, science and technology; and motivating them to pursue studies in these areas; and

WHEREAS, the City of Kenai and the Alaska Aerospace Development Corporation, through the participation of a citizen steering committee, have cooperatively commissioned the development of a business plan for the Challenger Learning Center located at Kenai, Alaska; and

WHEREAS, preliminary review of the project indicates that the Challenger Learning Center would operate successfully in Kenai, Alaska, and with use of advanced technology provide access to the dynamic learning experience of simulated space flight for all Alaskans; and

WHEREAS, the Challenger Center for Space Science Education has invited the City of Kenai to submit an application for designation as a Challenger Learning Center for Alaska at the Board's April meeting in Alexandria, Virginia; and

WHEREAS, an expression of support with letters and resolutions is sought as part of the application package for consideration by the Challenger Center for Space Education in designating a location in Alaska;

NOW, THEREFORE, BE IT RESOLVED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH:

SECTION 1. That the Kenai Peninsula Assembly supports the placement of the Challenger Learning Center in Kenai as an asset to the community of the Kenai Peninsula joining the partnership of educators, government officials and private corporations who support this effort in behalf of all Alaskans.

ADOPTED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH THIS 19th DAY OF MARCH, 1996.

Andrew P. Scalzi, Assembly President

ATTEST:

Gaye J. Vaughan, Borough Clerk

Resolution 96-02

A resolution supporting establishment of a Challenger Learning Center in Kenai, Alaska

WHEREAS, the Challenger Learning Center was founded by the Families of the Challenger 51-L crew that met with a fatal accident during the Challenger flight to the moon on January 28, 1986, and

WHEREAS, the Challenger Learning Center uses space exploration as a theme to create a positive learning experience raising students expectations of success; fostering in them a long-term interest in math, science and technology; and motivating them to pursue studies in these areas, and

WHEREAS, the city of Kenai and the Alaska Aerospace Development Corporation, through the participation of a citizen steering committee, have cooperatively commissioned the development of a business plan for the Challenger Learning Center located at Kenai, Alaska, and

WHEREAS, preliminary review of the project indicates that the Challenger Learning Center would operate successfully in Kenai, Alaska, and with use of advanced technology provide access to the dynamic learning experience of simulated space flight for all Alaskans, and

WHEREAS, the Challenger Center for Space Education has invited the City of Kenai to submit an application for designation as a Challenger Learning Center for Alaska at the board's April meeting in Alexandria, Virginia, and

WHEREAS, an expression of support with letters and resolutions is sought as part of the application package for consideration by the Challenger Center for Space Education in designating a location in Alaska,

NOW THEREFORE BE IT RESOLVED THAT THE KENAI VISITORS & CONVENTION BUREAU, INC. SUPPORTS THE PLACEMENT OF THE CHALLENGER LEARNING CENTER IN KENAI AS AN ASSET TO THE COMMUNITY OF THE KENAI PENINSULA JOINING THE PARTNERSHIP OF EDUCATORS, GOVERNMENT OFFICIALS AND PRIVATE CORPORATIONS WHO SUPPORT THIS EFFORT IN BEHALF OF ALL ALASKANS.

Adopted this 26 day of March, 1996

Frank Fiala

Frank Fiala, President

Kimberly J. Booth

Attest

Resolution

A resolution supporting establishment of a Challenger Learning Center in Kenai, Alaska.

Whereas, the Challenger Learning Center was founded by the families of the Challenger 51-L crew that met with a fatal accident during the Challenger flight to orbit the earth on January 28, 1986, and

Whereas, the Challenger Learning Center uses space exploration as a theme to create a positive learning experience raising students expectations of success; fostering in them a long-term interest in math, science and technology; and motivating them to pursue studies in these areas, and

Whereas, the City of Kenai and the Alaska Aerospace Development Corporation, through the participation of a citizen steering committee, have cooperatively commissioned the development of a business plan for the Challenger Learning Center located at Kenai, Alaska, and

Whereas, preliminary review of the project indicates that the Challenger Learning Center would operate successfully in Kenai, Alaska, and with use of advanced technology provide access to the dynamic learning experience of simulated space flight for all Alaskans, and

Whereas, the Challenger Center for Space Science Education has invited the City of Kenai to submit an application for designation as a Challenger Learning Center for Alaska at their April board meeting in Alexandria, Virginia, and

Whereas, an expression of support with letters and resolutions is sought as part of the application package for consideration by the Challenger Center for Space Science Education in designating a location in Alaska,

Now therefore be it resolved that the Kenai Peninsula College Council supports the placement of the Challenger Learning Center in Kenai as an asset to the community of the Kenai Peninsula joining the partnership of educators, government officials and private corporations who support this effort in behalf of all Alaskans.

Adopted this 14th of March, 1996.

Linda D. Boneswell

GREATER KENAI CHAMBER OF COMMERCE
RESOLUTION 96-04

A RESOLUTION OF THE GREATER KENAI CHAMBER OF COMMERCE BOARD OF DIRECTORS SUPPORTING ESTABLISHMENT OF A CHALLENGER LEARNING CENTER IN KENAI, ALASKA.

WHEREAS, the Kenai Chamber of Commerce is the 3rd largest Chamber in the State of Alaska and represents the interests of 440 business members; and,

WHEREAS, the Challenger Learning Center was founded by the families of the Challenger 51-L crew that met with a fatal accident during the Challenger flight to orbit the earth on January 28, 1986; and,

WHEREAS, the Challenger Learning Center uses space exploration as a theme to create a positive learning experience raising students expectations for success; fostering in them a long-term interest in math, science and technology; and motivating them to pursue studies in these areas; and,

WHEREAS, the City of Kenai and the Alaska Aerospace Development Corporation, through the participation of a citizen steering committee, have cooperatively commissioned the development of a business plan for the Challenger Learning Center located at Kenai, Alaska; and,

WHEREAS, preliminary review of the project indicates that the Challenger Learning Center would operate successfully in Kenai, Alaska, and with use of advanced technology provide access to the dynamic learning experience of simulated space flight for all Alaskans; and,

WHEREAS, the Challenger Center for Space Education has invited the City of Kenai to submit an application for designation as a Challenger Learning Center for Alaska; and,

WHEREAS, an expression of support with letters and resolutions is sought as part of the application package for consideration by the Challenger Center for Space Education in designating a location in Alaska,

NOW, THEREFORE, BE IT RESOLVED that the Greater Kenai Chamber of Commerce Board of Directors supports the placement of a Challenger Learning Center in Kenai, as an asset to the community of the Kenai Peninsula and the State of Alaska, joining the partnership of educators, government officials and private corporations who support this effort on behalf of all Alaskans.

PASSED BY THE GREATER KENAI CHAMBER OF COMMERCE BOARD OF DIRECTORS THIS 1st DAY OF March, 1996.

Mark A. Necessary

Mark Necessary, President
Kenai Chamber of Commerce
Board of Directors

ATTEST: Laura R. Measles

Laura R. Measles
Executive Director

Alaska Space Grant Program

349 Duckering Building • University of Alaska Fairbanks • Fairbanks, Alaska 99775-0660 • Office (907) 474-6833 • FAX (907) 474-6087

March 28, 1996

Ms. Kathy Scott
Alaska Challenger Center Steering Committee
POB 2488
Kenai, AK 99611

Dear Ms. Scott,

On behalf of the Alaska Space Grant Program, I would like to offer my strong endorsement for your efforts to establish the Alaska Challenger Center and Electronic Classroom in Kenai, AK.

The Alaska Space Grant Program was established in 1991 at the University of Alaska Fairbanks to promote the enhancement of space-related education and research throughout Alaska. The proposed Alaska Challenger Center would be an important asset for space education in Alaska. Once this Center is established, I hope you will consider becoming an academic affiliate of the Alaska Space Grant Program. In the meantime, please let me know if I can be of assistance to you in making this project a reality.

We are currently working on the development of an On-Line Alaska Teacher Resource Manual (ATRM), which is currently available on the World Wide Web at

http://asgp.uafsoe.alaska.edu.

The ATRM is intended to help teachers in Alaska locate space-related curricula and materials for their classroom. If you would send us updates on the status of the Alaska Challenger Center as this project develops, we would be happy to post them on our ATRM to help promote the project.

I look forward to working with you in the coming months to promote space education throughout Alaska.

Sincerely,

Joe Hawkins, Director
Alaska Space Grant Program

Mile 14.5 Kenai Spur Hwy • P.O. Box 3029 • Kenai, AK 99611-3029 • (907) 283-3335 • FAX (907) 283-3913

KENAI PENINSULA BOROUGH
ECONOMIC
DEVELOPMENT
DISTRICT, INC.

March 22, 1996

Mayor John Williams
City of Kenai
210 Fidalgo Avenue, Suite 200
Kenai, Alaska 99611

RE: Support for the Alaska Challenger Learning Center

Dear Mayor Williams:

The Kenai Peninsula Borough Economic Development District, Inc. (EDD) has included as a priority project in its Overall Economic Development Program (OEDP) 1995-96 to "assist communities and education institutions in establishing and expanding local general studies, vocational, and research facilities." One of these such facilities is the Challenger Learning in the City of Kenai.

The mission of the EDD is to enhance the quality of life for Borough residents through the retention and creation of jobs. The Challenger Learning Center not only provides opportunities for the youth of our area to experience first hand the application of their studies and opportunities for leadership and team building but provides economic opportunities for the whole Kenai Peninsula Borough and State of Alaska.

The EDD Board of Directors has endorsed the participation of the EDD in your efforts and will be discussing a resolution of support for the Challenger Learning Center in its upcoming meeting scheduled for March 28, 1996. I applaud the efforts of the City of Kenai.

Sincerely,

Stanley R. Steadman
Executive Director

SRS/ajd

Kenai Peninsula Chapter of Phi Delta Kappa

THE PROFESSIONAL FRATERNITY IN EDUCATION

106 Wooded Glen Ct.
Kenai, Alaska 99611

March 11, 1996

Officer Directory

Diane Simmons	President
Frames & Things	262-5248
Sue Liebner	VP Programs
Kenai Middle School	283-4896
Cate Bendock	VP Membership
Sterling Elem.	262-4944
Linda Zimmerman	Secretary
North Star Elem.	776-5575
Debbie Sonberg	Treasurer
New Frontier Training	262-9055
Linda Overturf	Foundation Rep
Soldotna Middle School	262-4344
Lisa Whitney	Historian
Mountain View Elem.	283-6148
Donna Peterson	Research Rep
North Star Elem.	776-5575
Dennis Simmons	Newsletter Editor
Kenai Peninsula College	262-0320
Mo Sanders	Past President
KPBSD	262-9137
Sherril Miller	Adviser
Kenai Peninsula College	262-0390

In consideration of the Challenger Learning Center:

On behalf of the 115 members of the Kenai Peninsula Chapter of Phi Delta Kappa, the executive board would like to express its unanimous support for building a Challenger Learning Center in Kenai, Alaska.

Local Kappans recognize the potential role of the Challenger Learning Center in creating a positive learning experience and believe it fits with our mission of promoting public education.

Phi Delta Kappa, an international organization for professional educators, has a membership of 126,000 men and women from all facets of education. The tenets of the organization are service, research, and leadership.

The Kenai Peninsula Chapter of PDK annually recognizes local people for their outstanding contributions to education. The Chapter also provides local scholarships to prospective educators and supports local education through various projects.

Sincerely,

Diane Simmons

Diane Simmons, President
Kenai Peninsula Chapter of PDK

Education • *Research* • *Service*

Greater Soldotna Chamber of Commerce

P.O. Box 236 • Soldotna, AK 99669 • Phone: 262-9814 • Fax: 262-3566

February 23, 1996

John Williams, Mayor
City of Kenai
Alaska Challenger Learning Center
P.O. Box 2488
Kenai, AK 99611-2488

Dear Mayor Williams:

The Greater Soldotna Chamber of Commerce would like to lend its support for the placement of a Challenger Learning Center within the city of Kenai. Our organization knows that the people of the central peninsula will benefit directly from the placement of this facility in our area.

A Challenger Learning Center would utilize space exploration as a theme to create a positive learning experience for students and other members of our communities. Education and the economy are important quality of life factors for sustaining the good health of our communities. Assuring the future of our residents through innovative, diversified economic growth is essential. The Soldotna Chamber believes that the Alaska Challenger Learning Center readily meets these goals and objectives by providing year-round educational opportunities.

The possibility of establishing a Center in Alaska is very exciting. Placement of the facility in the central peninsula area is ideal. Please accept this letter as an indication of the Greater Soldotna Chamber of Commerce's full support to the City of Kenai in this endeavor.

Sincerely,

Preston E. Nelson

Preston "Nick" Nelson
President

City of Soldotna
177 North Birch • Soldotna, Alaska 99669 • Phone: (907) 262-9107

March 25, 1996

Kathy Scott
Project Facilitator
The Alaska Challenger Learning Center Project
P.O. Box 2488
Kenai, Alaska 99611

This is to acknowledge our support of the efforts of the City of Kenai and the Alaska Aerospace Development Corporation in establishing a Challenger Learning Center in Kenai, Alaska. We applaud the efforts that have brought about the invitation to submit an application for this purpose.

The establishment of such a center can enhance not only this area, but the entire state of Alaska. We foresee the enrichment of our community by providing a positive learning experience for our young people. It will enable them to pursue their interests in math, science and technology, giving them a real taste of what it is possible to accomplish.

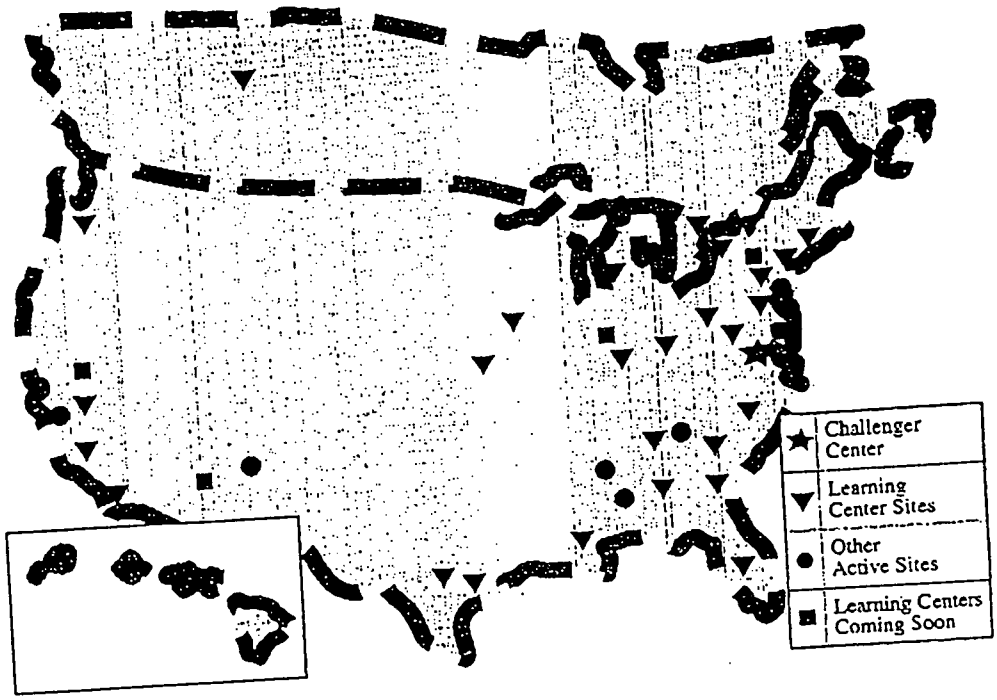
We believe the location of this project in Kenai, Alaska will be a community asset; and we join in with those other government officials, educators and private corporations who support this endeavor.

Sincerely,

Joel L. Wilkins, Acting City Manager for
Ken Lancaster, Mayor

Challenger Learning Center Specifics

- Sites Map & Listing
- Development Phases
- Technical Guidelines
- Learning Center Simulator Components
- Licensing Fee Entitlements



Challenger Learning Center Sites

Houston Museum of Natural Science, Houston, TX
Howard B. Owens Science Center, Lanham, MD
Museum of Science Industry, Tampa, FL
Kiser Middle School, Dayton, OH
Mathematics & Science Center, Richmond, VA
Discovery Museum, Inc., Bridgeport, CT
Edmonton Space & Science Center, Edmonton, Alberta
Ontario Science Center, Don Mills, Ontario
Reuben H. Fleet Space Theater & Science Center, San Diego, CA
Science Center of Iowa, Des Moines, IA
Challenger Learning Center of Rochester, Rochester, NY
Discovery Place, Inc., Charlotte, NC
Museum of Flight, Seattle, WA
Challenger Center Hawaii, Kapolei, HI
Kansas City Museum, Kansas City, MO
George Observatory, Needville, TX
Kalamazoo Valley Museum, Kalamazoo, MI
Challenger Research Development & Training Center, Washington, DC
Framingham State College, Framingham, MA
Buchler Challenger and Science Foundation, Inc., Paramus, NJ
Brownsburg Community School Corp., Brownsburg, IN
Wheeling Jesuit College, Wheeling, WV
Challenger Learning Center at University of Tennessee at Chattanooga, Chattanooga, TN
California State University, Dominquez Hills, Carson, CA
William Perry Middle School, Columbia, SC
Kirby Smith Middle School (3/96), Jacksonville, FL
Columbus College (3/96), Columbus, GA
Castle Challenger Learning Center Foundation (4/96), Merced, CA

Future Challenger Learning Center Sites

Binningham, Alabama
Anne Arundel County, Maryland
Suffren, New York
Memphis, Tennessee
Knoxville, Tennessee
Santa Clara, California
Phoenix, Arizona
Albuquerque, New Mexico
Oakland, California
Bronx, New York
Philadelphia, Pennslyvannia
Crown Point, Indiana

Challenger Center for Space Science Education
1029 N. Royal Street, Suite 300 • Alexandria, VA 22314 • 703-683-9740 • FAX 703-683-7546

Challenger Learning Center
Development Phases

Phase 1

Preliminary Preparation

Challenger Center site visit(s) by Regional representative
Site develops education plan
Site assigns Project Manager

Technical Site Preparation

Challenger Center technical site visit

- meet with Project Manager and architect
- review sketch layout of floor plan
- discuss site renovations
- site receives "Site Design Study"
- review specification

Educational Programs Preparation

Challenger Center education site visit

- meet with school superintendent and members of the education committee
- educational standards review
- discuss Challenger Center programs and target audience
- review additional educational programs as option

Development Plan

Development plan created with Regional representative

- Site plans fundraising and public relations strategy
- Site recruits community support, including business and political leaders
- "Champion" for campaign

Application Process

Final readiness review
Site submits application with $1,000 non-refundable application fee

Phase 2

Application Process

Challenger Center Board Approval

Pre-Contract Planning

Site pays $50,000 fee for deposit and to reserve target time frame for installation
Site signs "Letter of Agreement"
Timeline finalized for installation and payment schedule
Challenger Center prepares final blueprint
Site approves final blueprint and returns signed-off copy to Challenger Center

Contract

40% of price due at contract signing (minus $50,000 already paid)

Phase 3

Site Preparation

Simulator construction and production
Site appoints engineer
Site obtains contract bids for renovation
Site signs renovation contract
Site demolition
Site construction completed, including HVAC, walls, electrical, flooring, ceiling, etc.
Educational Development
Site hires Flight Directors
Flight Director training at Challenger Research, Development and Training Center
Implement mission marketing plan to teachers
Simulator Inspection
Challenger Center inspection of simulator at fabricator
Independent Flight Director inspection of simulator at fabricator
Site representative inspection of simulator at fabricator
Shipment of simulator to site after payment

Contract

30% payment due at approval of simulator

Phase 4

Installation

Carpentry
Electrical

Contract

20% payment due at completion of installation

Review

Software/Hardware review
Challenger Center staff conducts additional week of Flight Director training at site
Test missions and debugging

Opening Plan

Review media/PR support plan
Develop timeline for tasks and responsibilities
Contact Challenger Center family members and VIP's
Regional Director reviews draft of invitation
Grand Opening event planned
Grand Opening press release issued

Site Sign-Off

Walkthrough of site
Final 10% payment due

Phase 5

Grand Opening
Public Missions
Ongoing Challenger Center Support

Technical Guidelines

Challenger Learning Centers are designed to be installed as part of a larger institution, be it school, museum or other entity. Renovated or newly constructed spaces house the Challenger Learning Centers, and Challenger Center works with sites to create a site-specific design to fit into the designated area.

Space Requirements

Mission Control - A minimum of 650 unobstructed square feet, also preferably in a square configuration, is necessary to accommodate Mission Control.

Space Station - A minimum of 1,300 unobstructed square feet, preferably in a square configuration, is required for Space Station, the labyrinth passageway to Space Station, and the technical access at the rear of the modules.

The 2,000 square feet allotted for Mission Control and Space Station will be examined during a feasibility visit, and the site will need to provide as-builts of the designated space for review.

Other areas Challenger Center recommends:

- **Orientation area** - This can be used solely for Challenger Learning Center orientation, which should accommodate 40 students, or can be a multi-purpose area which might already exist within the building.

- **Observation area for Mission Control** - Since the Challenger Learning Center is such a visual experience, it is beneficial to have a viewing area where your guests can watch students "fly" in Mission Control.

- **Office space** - for the Flight Directors should be near or adjacent to the Challenger Learning Center and should accommodate two people.

- **Reception area** - In many cases, a reception area and office space for the Challenger Learning Center will be incorporated into the current institution's building space and organizational structure. If these areas do not exist, the site should give consideration to including them in the plans.

- **Soundproofing or a soundproof** area should be between Mission Control and Space Station.

Sites should also consider the proximity of:

- Restroom facilities
- Parking for buses/visitors
- Disabled access (All components of the Challenger Learning Center are in accordance with Americans with Disabilities Act guidelines.)
- Emergency exits

(For a copy of technical guidelines and a technical installation manual, contact your Regional representative at Challenger Center.)

Learning Center Simulator

As described in Schedule C of the current Challenger Learning Center contract, the following is a summary of the components a site receives when purchasing a Challenger Center simulator.

STRUCTURE

Approximately 101 linear feet of custom built cabinetry/modules for Mission Control and Space Station
Access airlock
Doors (2)
Panels (5)
Design and coordination
Site specific modification and development
Simulator inspections
Simulator crating, shipment, delivery (site specific)
Installation, testing and adjustments

VIDEO NETWORK

Video matrix network
Color camera with pan tilt (2)
Black & white cameras (6)
Video monitor for Space Station (4)

COMMUNICATIONS NETWORK

Apple Power Mac Computers (18)
14" RGB monitors (17)
Trackboards – keyboards with trackballs (18)
Stylewriter printers (4)
Modem (1)
Ethernet network system
35" monitors for Mission Control Wall (4)

SCENARIO MATERIALS AND SOFTWARE

Challenger Learning Center Network software
Scenario curriculum (scenario books & Learning Froniter activity books)
Training for two Flight Directors
Stools for Space Station (20)
Costumes for students in Space Station (20)

Ten years of touching the future.... learning inspiring. exploring.

1029 North Royal Street Suite 300 Alexandria, Virginia 22314 703-683-9740 FAX 703-683-7546

Challenger Center Licensing Fee

As discussed in Section II, Paragraph 2 of the current Challenger Learning Center contract, the following is a summary of what Challenger Center's Licensing Fee encompasses.

- **The right to use the Challenger Center name and association with the Challenger Learning Center Network.**
  This includes the use and display of Challenger Center's logo and various designs. It also allows the use of selected mission simulation software and all related educational materials created and distributed by Challenger Center. Scenario specific logos are also available to sites to use as part of their marketing and promotional materials.

  Identification as a Challenger Learning Center as part of a growing network of innovative educational centers across the United States and Canada allows sites to use this affiliation as part of funding proposals and grants, promotional efforts and media initiatives.

- **24-hour technical support, electronic bulletin board system to interact with other Challenger Learning Center sites and Flight Directors, and year-round training forums.**
  Challenger Center maintains a Network Support Team to troubleshoot and service each site. Challenger Center's technical staff can electronically access computers from our Alexandria office to update scenario software, provide enhancements and solve problems. Our staff also provides simulator maintenance support to walk site personnel through solving problems, finding parts and replacements, and traveling to the site for assistance when necessary.

  Challenger Center also maintains and encourages contact among all our Learning Center sites through an electronic bulletin board system (BBS). Flight Directors at each site can send e-mail, download software and other materials, exchange ideas and interact with each other and Challenger Center personnel. This BBS is provided and maintained by Challenger Center.

  Challenger Center also provides professional development and training opportunities for Learning Center personnel throughout the year. In addition to hosting an annual Flight Director Conference, special interest forums are planned throughout the year. While sites traditionally pick up their Flight Directors' expenses, the conference and forums and their related activities are provided at no charge.

- **An annual supply of 300 Learning Frontiers activity booklets to use as part of teacher training activities and an annual supply of 300 scenario specific activity books.**
  This benefit was added in 1995 when Challenger Center redesigned its scenario materials. While sites were historically provided with an initial supply of materials, they were then responsible for the reproduction of these materials. As part of the Challenger Learning Center Network, sites now receive an annual allotment of activity and scenario books which are printed and bound.

  The scenario booklets correspond with the simulation software being flown by the site. These materials are used to prepare groups for the specific missions they will fly. The activity books are an extension to a site's teacher training efforts and provide classroom activities which reinforce the Learning Center experience.

Ten years of touching the future....
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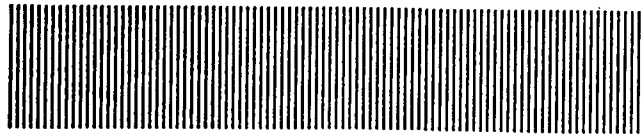
1029 North Royal Street Suite 300 Alexandria, Virginia 22314 703-683-9740 FAX 703-683-7546

Building Cost
&
Financing Information

KLUGE & ASSOCIATES
ARCHITECTS PLANNERS
130 Trading Bay, Suite 330 283-3698
Kenai Alaska 99611



March 22, 1996

K. Scott and Associates, Inc.
Kathy Scott
PO Box 2488
Kenai, AK 99611

RE: ALASKA CHALLENGER LEARNING CENTER

Dear Kathy:

As requested at our last design meeting, I have developed a construction budget for the referenced project. The costs listed below are our professional estimate of costs at this schematic level of design based on approximately 13,000 sq. ft. of building area. We have not had the opportunity to do an in-depth analysis of the sophisticated equipment required for the Multimedia/Telecommunications Area. This installation should address the most current technology, as well as providing flexibility for the future. It is our recommendation that a specialty professional consultant be included for the design of this area's equipment. Our estimated project cost is as follows:

Building, Site Development and Landscaping	S 2,015,000
Multimedia/Teleconferencing Equipment	200,000
Geotechnical Report/Surveying	10,000
Architectural/Engineering Design Fees	155,050
Architectural/Engineering Construction Admin. Fees	100,000
Challenger Equipment	750,000
Exploratorium Equipment	50,000
5% Construction Contingency	113,270
2.5% per annum inflation factor for Construction in 1998	100.750
Total	S 3,494,070

The above construction cost is based on construction in 1998 and current pricing we have available from other work under construction. If construction is scheduled for a later date, an appropriate inflation rate should be applied to the cost. Please feel free to contact me if you have any questions or need more information.

Sincerely,
KLUGE & ASSOCIATES

Bill Kluge

Bill Kluge, Principal Architect

BK:tw

H. One Hundred Principal Contractors (Business Firms)

The one hundred contractors that received the largest dollar value of NASA direct awards to business firms during Fiscal Year 1995 are shown below. The awards to these contractors accounted for 88 percent of the direct awards to business firms during the year. The smallest aggregate award to any contractor was in excess of $8.0 million. Of the one hundred contractors, 19 were small business firms and 17 were disadvantaged firms at the time of award.

ONE HUNDRED CONTRACTORS (BUSINESS FIRMS) LISTED
ACCORDING TO TOTAL AWARDS RECEIVED
FISCAL YEAR 1995
(S=Small Business/D=Disadvantaged Business)

	CONTRACTOR		AWARDS (THOUSANDS)	PERCENT
	TOTAL AWARDS TO BUSINESS FIRMS		$10,311,491	100.00
1.	BOEING CO.		1,441,977	13.98
2.	ROCKWELL INTERNATIONAL CORP.		1,022,151	9.91
3.	MARTIN MARIETTA CORP.		737,403	7.15
4.	LOCKHEED SPACE OPERATIONS CO.		558,447	5.42
5.	MCDONNELL DOUGLAS CORP.		468,094	4.54
6.	THIOKOL CORP.		439,978	4.27
7.	COMPUTER SCIENCES CORP.		311,114	3.02
8.	ROCKWELL SPACE OPERATIONS INC.		306,153	2.97
9.	T R W INC.		288,202	2.80
10.	ALLIEDSIGNAL TECHNICAL SERVICES		231,100	2.24
11.	E G & G FLORIDA INC.		182,595	1.77
12.	U S B I BOOSTER PRODUCTION CO.		171,643	1.66
13.	LOCKHEED ENGRG & SCIENCE CO.		164,257	1.59
14.	LORAL AEROSPACE CORP.		163,582	1.59
15.	UNITED TECHNOLOGIES CORP.		158,564	1.54
16.	SANTA BARBARA RESEARCH CENTER		93,761	.91
17.	LOCKHEED MISSILES & SPACE CO.		93,325	.91
18.	BOEING COMMERCIAL AIRPLANE GROUP		88,641	.86
19.	HUGHES INFORMATION TECH. CORP.		87,065	.84
20.	GRUMMAN AEROSPACE CORP.		65,571	.64
21.	JOHNSON CONTROLS WORLD SERVICES		65,296	.63
22.	BAMSI INC.	(D)	65,018	.63
23.	SPACE SYSTEMS LORAL INC.		64,620	.63
24.	TELEDYNE INDUSTRIES INC.		60,834	.59

ONE HUNDRED CONTRACTORS (BUSINESS FIRMS) LISTED
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	CONTRACTOR		AWARDS (THOUSANDS)	PERCENT
25.	GENERAL DYNAMICS CORP		58,474	.57
26.	CAE LINK CORP.		52,164	.51
27.	GENERAL ELECTRIC CO.		51,010	.49
28.	MARTIN MARIETTA SERVICES INC.		50,935	.49
29.	STERLING FEDERAL SYSTEMS INC.		49,228	.48
30.	HUGHES S T X CORP.		47,789	.46
31.	BALL CORP.		47,030	.46
32.	HUGHES AIRCRAFT CO.		43,956	.43
33.	SCIENCE APPLICATION INTL CORP.		42,908	.42
34.	KRUG LIFE SCIENCES INC.		40,991	.40
35.	AEROJET GENERAL CORP.		39,617	.38
36.	CORTEZ III SERVICE CORP.		38,198	.37
37.	SPACEHAB INC.	(S)	37,724	.37
38.	NYMA INC.	(S)(D)	36,782	.36
39.	BIONETICS CORP.		36,111	.35
40.	RAYTHEON SERVICE CO.		34,539	.34
41.	SWALES & ASSOCIATES INC.	(S)	33,269	.32
42.	GENERAL ELECTRIC U T C JV		32,712	.32
43.	N S I TECHNOLOGY SERV. CORP.		32,187	.31
44.	SVERDRUP TECHNOLOGY INC.		32,027	.31
45.	C T A INC.		31,734	.31
46.	I NET INC.	(D)	31,181	.30
47.	CRAY RESEARCH INC.		28,952	.28
48.	ALLIEDSIGNAL INC.		28,141	.27
49.	UNISYS CORP.		28,002	.27
50.	SILICON GRAPHICS INC.		27,059	.26
51.	BOEING COMPUTER SUPPORT SERVICES		26,685	.26
52.	MARTIN MARIETTA TECHNOLOGIES		25,400	.25
53.	ANALEX CORP.		25,288	.25
54.	JACKSON & TULL INC.	(S)(D)	24,612	.24
55.	MANHATTAN CONSTRUCTION CO.		24,600	.24
56.	ORBITAL SCIENCES CORP.	(S)	22,850	.22
57.	AIR PRODUCTS & CHEMICALS INC.		22,563	.22
58.	JOHNSON ENGINEERING CORP.	(S)	22,109	.21
59.	LOCKHEED ADVANCED DEVELOPMENT CO.		22,058	.21
60.	DYNCORP		20,610	.20

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	CONTRACTOR		AWARDS (THOUSANDS)	PERCENT
61.	HARRIS SPACE SYSTEMS CORP.		19,239	.19
62.	R M S TECHNOLOGIES INC.	(D)	18,544	.18
63.	INTERNATIONAL BUSINESS MACHINES		18,342	.18
64.	I T T CORP.		18,113	.18
65.	MICRO CRAFT INC.	(S)	17,840	.17
66.	DANIEL MANN JOHNSON MENDENHAL		17,655	.17
67.	E G & G LANGLEY INC.		17,536	.17
68.	GOVERNMENT MICRO RESOURCES	(S)(D)	17,351	.17
69.	HERNANDEZ ENGINEERING INC.	(S)(D)	16,719	.16
70.	CALSPAN CORP.		16,309	.16
71.	SCOTT CO. CALIFORNIA		15,868	.15
72.	CLEVELAND ELECTRIC ILLUMINATING		15,429	.15
73.	GENERAL SCIENCES CORP.		14,684	.14
74.	FAIRCHILD SPACE & DEFENSE CORP.		14,330	.14
75.	BROWN & ROOT SERVICES CORP.		14,146	.14
76.	E E R SYSTEMS CORP.	(S)(D)	13,953	.14
77.	LOCKHEED CORP.		13,942	.13
78.	ALBERT M. HIGLEY CO.		13,936	.13
79.	RECOM TECHNOLOGIES INC.	(S)(D)	12,950	.12
80.	SERV AIR INC.		12,903	.12
81.	SCIENCE SYSTEMS APPLICATIONS	(S)(D)	12,254	.12
82.	P R C INC.		12,229	.12
83.	VIRGINIA ELECTRIC & POWER CO.		12,032	.12
84.	NORTH AMERICAN CONSTRUCTION		11,663	.11
85.	ANSTEC INC.	(S)(D)	11,341	.11
86.	GILCREST ELECTRIC & SUPPLY CO.	(S)(D)	11,295	.11
87.	TRI COR INDUSTRIES INC.	(S)(D)	11,073	.11
88.	R M S ASSOCIATES INC. JV	(D)	10,567	.10
89.	NATIVE AMERICAN SERVICES INC.	(S)(D)	10,247	.10
90.	UNISYS GOVERNMENT SYSTEMS INC.		9,647	.09
91.	CRAY GRUMMAN SYSTEMS		9,335	.09
92.	OGDEN LOGISTICS SERVICES		9,295	.09
93.	WYLE LABORATORIES		9,136	.09
94.	MASON & HANGER SERVICES INC.	(S)	8,773	.08
95.	INTERMETRICS INC.		8,725	.08
96.	SYSCON SERVICES INC.		8,683	.08

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CONTRACTOR		AWARDS (THOUSANDS)	PERCENT
97. DIGITAL EQUIPMENT CORP.		8,587	.08
98. KELSEY SEYBOLD MEDICAL GROUP		8,320	.08
99. MILITARY CONSTRUCTION CORP.	(S)	8,247	.08
100. ANALYTICAL SERVICES & MAT INC.	(S)(D)	8,046	.08
OTHER*		1,213,321	11.77

*Includes other awards over $25,000 and smaller procurements of $25,000 or less.

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement (OERI)
Educational Resources Information Center (ERIC)

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